

101-150
Dr Ledebour and
from the author

Icones Plantarum; *favours*
OR, *Dr Fischer*

FIGURES,

WITH BRIEF

DESCRIPTIVE CHARACTERS AND REMARKS,

OF

Tillm m P. III
folkt
New or Rare Plants,

SELECTED FROM THE AUTHOR'S HERBARIUM.

BY

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LONDON:

LONGMAN, REES, ORME, BROWN, GREEN, AND LONGMAN.

1837.

TAB. CI.

OLIGOGYNE BURCHELLII.

GEN. CHAR. *Capitulum* pluriflorum heterogamum, fl. *radii* 1—5
 foemineis ligulatis, *disci* 6—8 hermaphr. tubulosis. *Involucr.*
 1-seriale erectum, squamis 5 ovali-oblongis foliaceis. *Recept.*
 planum, paleis lineari-lanceolatis (cuneatisve) planis. *Styli fl.*
herm. rami exserti hispidi. *Achenia* obcompressa seu teretius-
 cula submuriculata glabra aristis 2—4 conicis rigidis superata. —
 Herbæ Americanæ, habitu *Sanvitaliæ*, *diffusæ*, *puberulæ*. Folia
opposita petiolata ovata serrata subtriplinervia. Pedicelli
axillares tricephali. Capitula parva. Flores flavi. Genus
 affine *Sanvitaliæ*. D. C.

Oligogyne Burchellii, pedunculis capitulo plerumque multo longi-
 oribus, acheniis oblongo-obovatis obtuse trigonis, paleis cunei-
 formibus apice incis.

HAB. Rio Janeiro. *Wm. J. Burchell, Esq. (n. 12.)*

I think it will be seen from the above character of De Candolle
 that the present plant belongs to his Genus *Oligogyne*; notwith-
 standing some slight discrepancies, such as the included branches
 of the style in the discal florets, and the very different form of
 the paleæ. The former may be owing to the less advanced state
 of the flowers in our specimen; the latter can only be con-
 sidered of specific importance. Independent of this peculiarity
 in the paleæ, our plant does not well accord with the characters,
 slightly marked as they are, of any of that author's 3 species, of
 which two are from Brazil and one from Mexico.

Fig. 1. Capitulum. *f.* 2. radial floret with its palea. *f.* 3.
 discal floret with its palea. *f.* 4. achenium (scarcely mature).
f. 5. an arista or scale of the pappus:—*magnified*.





TAB. CII.

IRESINE GRANDIFLORA.

Caule erecto tereti glabriusculo, foliis ovato-acuminatis glabris, paniculæ elongatæ foliosæ ramis patentibus subpubescentibus sæpissime trichotomis, spicarum floribus solitariis subglomeratisque, sepalis obtusis striatis, lana exserta.

HAB. Casapi, Cordillera of Peru. *Mathews.* (n. 1419.)

The Genus *Rosea* of Martius seems to me only to be distinguished from *Iresine* by having “polygamo-monoicous,” not diœcious, flowers:—a character, which, if important, is very difficult to be distinguished in the dried specimens. From all the species known to me of these genera, our plant is easily recognised by the larger flowers, and by their being distantly placed, and often but not always, solitary (rarely glomerated) upon the rachis of the spike. In these respects and indeed in the whole habit and ramification there is a striking affinity between *I. grandiflora* and the *Hebanthe paniculata*, Mart. Nov. Gen. tab. 140:—but the flowers of that plant have a very different “cupula staminea.” The anthers in ours are truly one-celled, though a different appearance is, by an error of the artist, given to some of them in the plate. The woolly hairs in the flowers are very copious, arising from the base of each of the two inner sepals.

Fig. 1. Flower with its bractea. *f.* 2. the same laid open:—*magnified.*





TAB. CIII. A.

HOLOTHRIX HARVEIANA.

Foliis binis ovatis strigosis, scapo retrorsum piloso, spica secunda multiflora, labello quinquelobo, laciniis lateralibus nanis acutis subæqualibus acutulis intermedia incurva, calcare horizontali abrupto subulato. *Lindl.*

Holothrix Harveiana. *Lindl. in Comp. to Bot. Mag. v. 2. p. 206.*

HAB. Low sandy moist plains, called "the Flats," which extend almost from Table Bay to False Bay; sometimes abundant. *Hon. W. H. Harvey.*

Fig. 1. Side view of a flower. *f.* 2. front view of do:—*magnified.*

TAB. CIII. B.

HOLOTHRIX PARVIFOLIA.

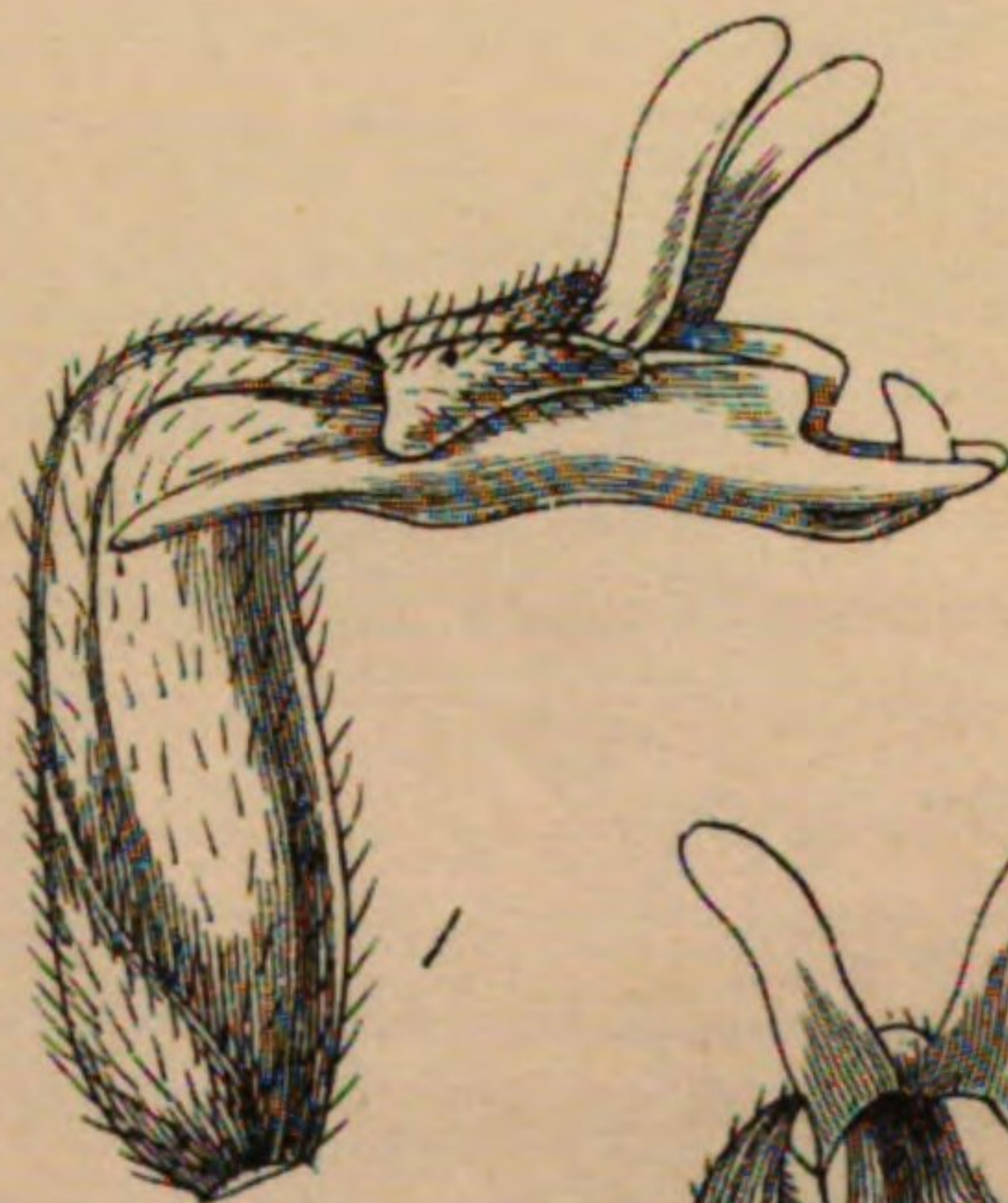
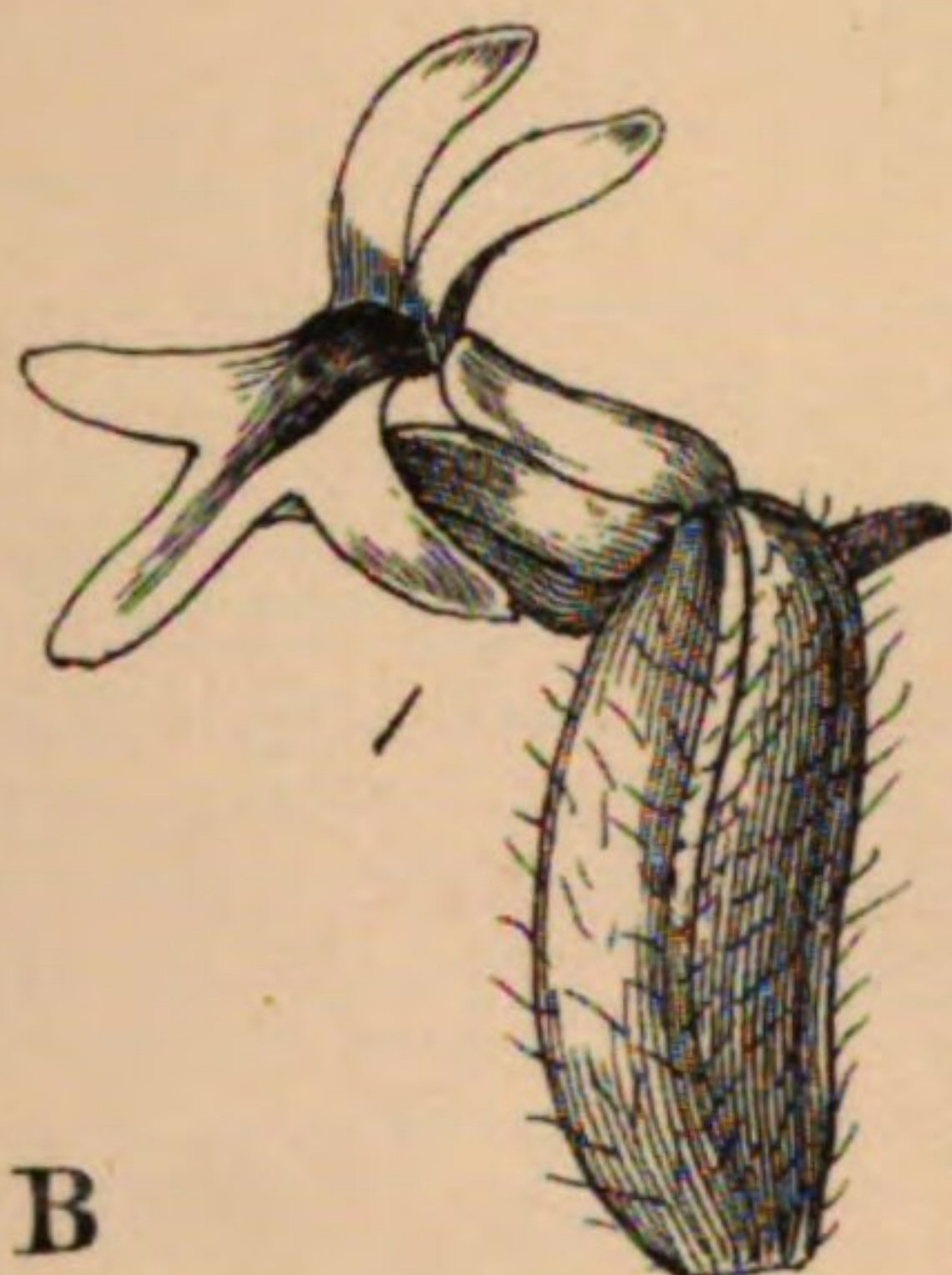
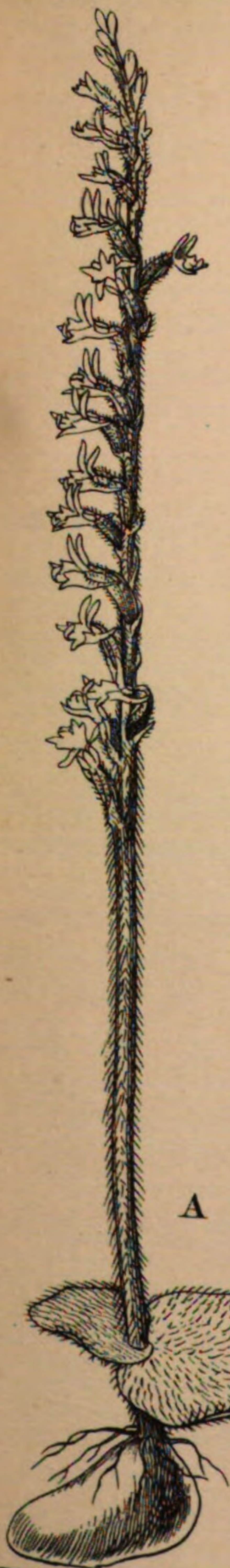
Folio solitario ovato-subrotundo hispido, scapo strigoso, spica quaquaversa, labello concavo trilobo, laciniis ovatis patentibus, calcare conico horizontali labelli longitudine. *Lindl.*

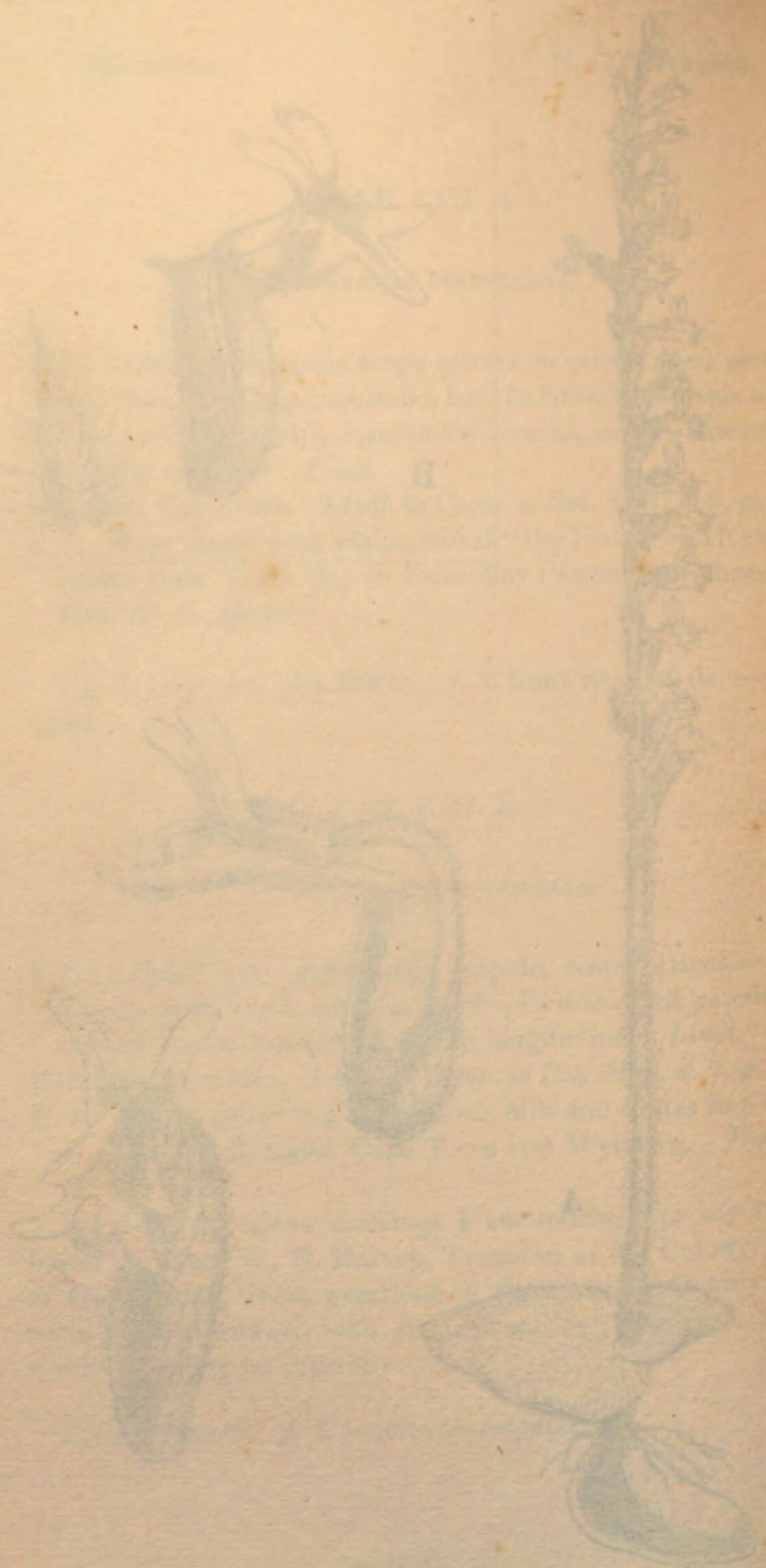
Holothrix parvifolia. *Lindl. in Comp. to Bot. Mag. v. 2. p. 207.*

HAB. In the driest and most barren hills and wastes in a stony or gravelly soil, about Cape Town and Wynberg. *Hon. W. H. Harvey.*

For both the above drawings I am indebted to my valued friend the Hon. W. H. Harvey, Treasurer at the Colony, Cape of Good Hope, whose exertions in the cause of Botany have already been crowned with eminent success; and from whom much more may be expected.

Fig. 1. Flower. *f.* 2. bractea:—*magnified.*





Harveianæ.

N. O. Orchideæ.

TAB. CIV.

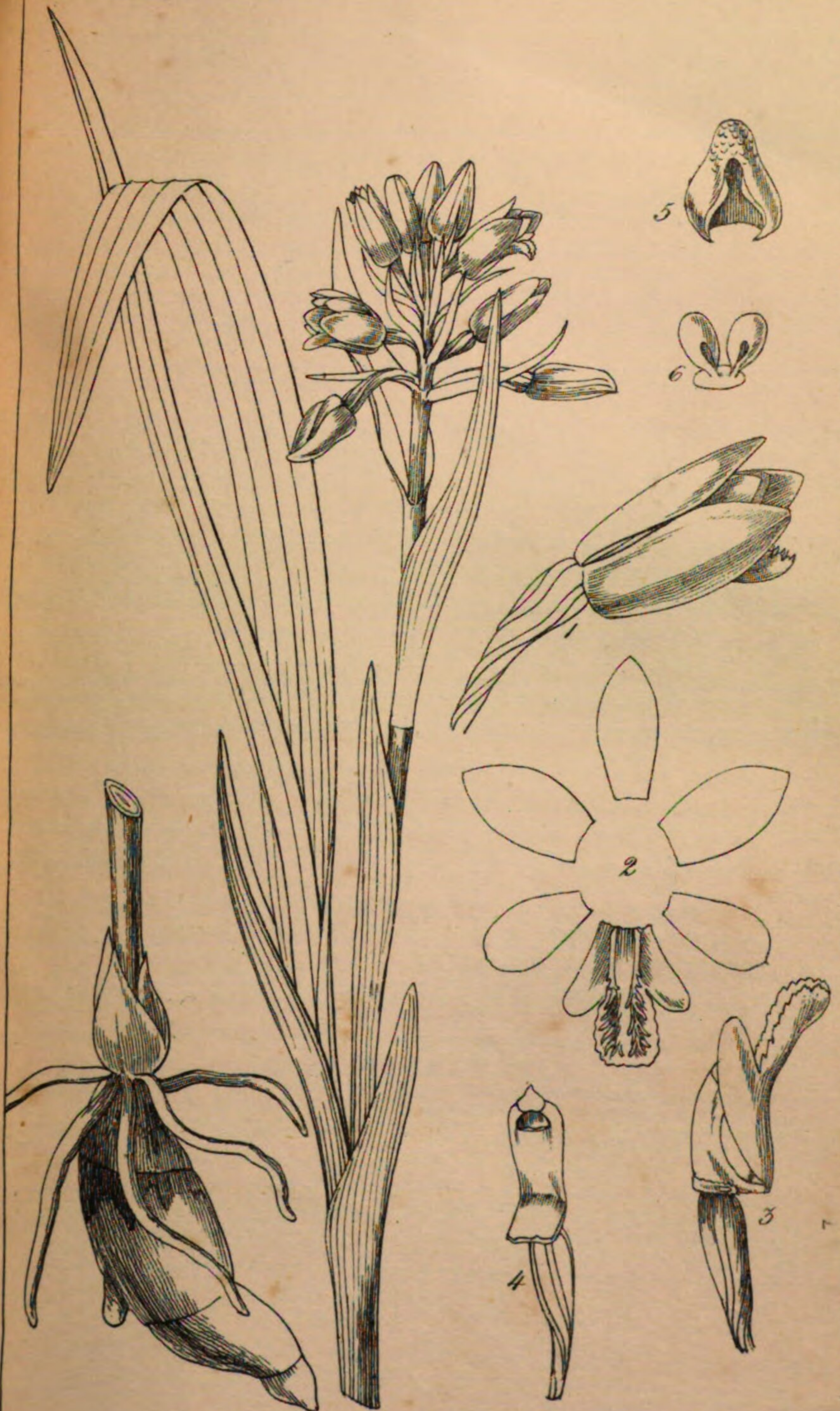
CYMBIDIUM PLICATUM.

Scapo erecto vaginato multifloro, spica ovata, bracteis ovario longioribus lineari-lanceolatis, sepalis erectis obtusis, labello trilobo, lobis lateralibus obtusis incurvis medio truncato involuto ciliato, foliis radicalibus ensiformibus plicatis scapo longioribus.
Lindl.

Cymbidium plicatum. *Harv. mst.—Lindl. in Comp. to Bot. Mag. v. 2. p. 203.*

HAB. Wet spots by the sides of drains and in marshes on “the Flats” near Wynberg, rare. Dec. 1835. *Hon. W. H. Harvey.*
I am indebted to Mr. Harvey for the drawing here given.

Fig. 1. Side view of a flower. *f.* 2. Sepals, petals, and lip. *f.* 3. Column and lip. *f.* 4. Front view of the column. *f.* 5. Anther-case. *f.* 6. Pollen-masses :—*magnified.*



TAB. CV.

ASPLENium DALHOUSIÆ.

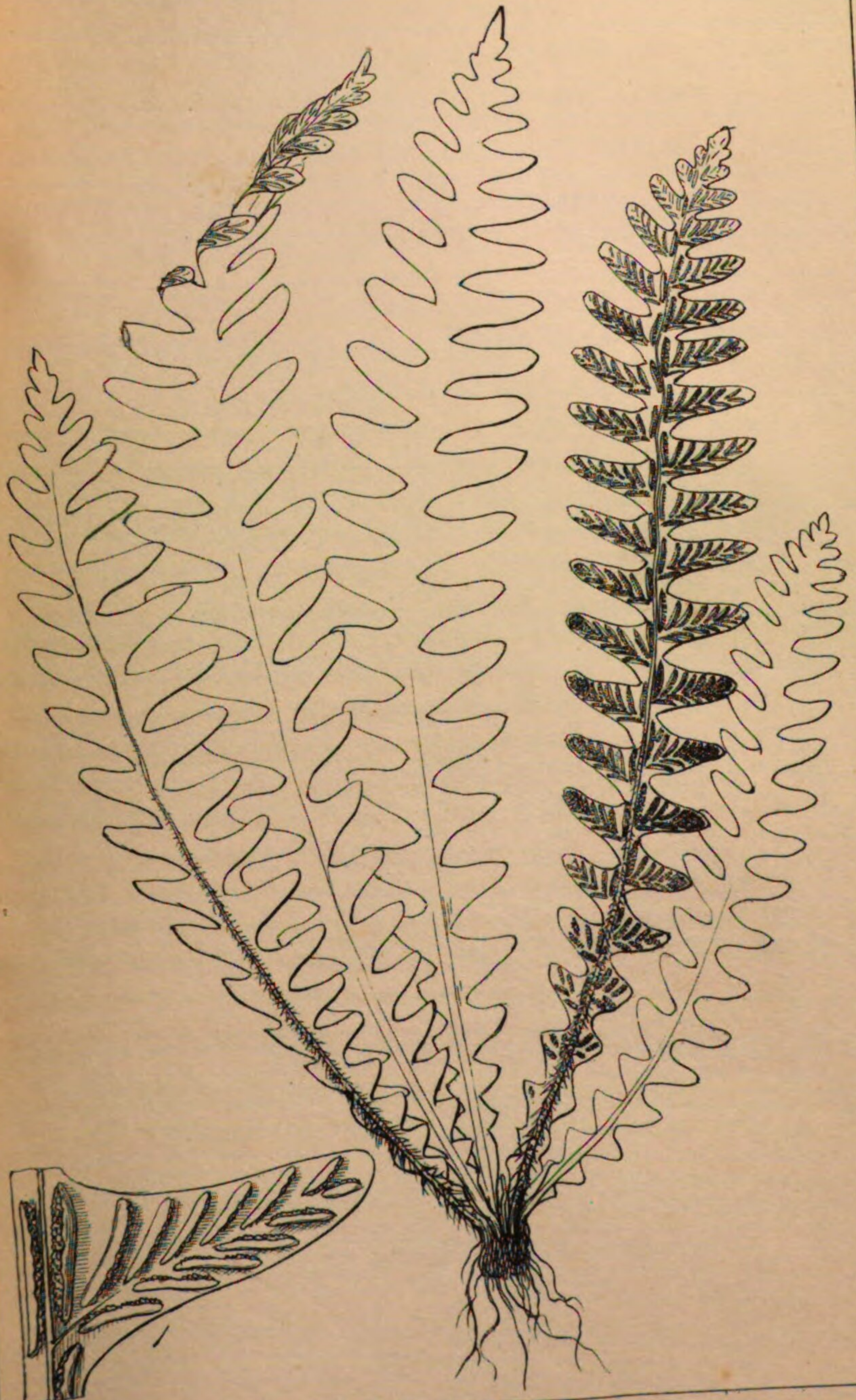
Fronibus cæspitosis lanceolatis pinnatifidis glabris utrinque nudis, laciniis horizontalibus oblongo-ovatis obtusis integerrimis, stipite perbreui rachideque inferiore subtus paleaceis.

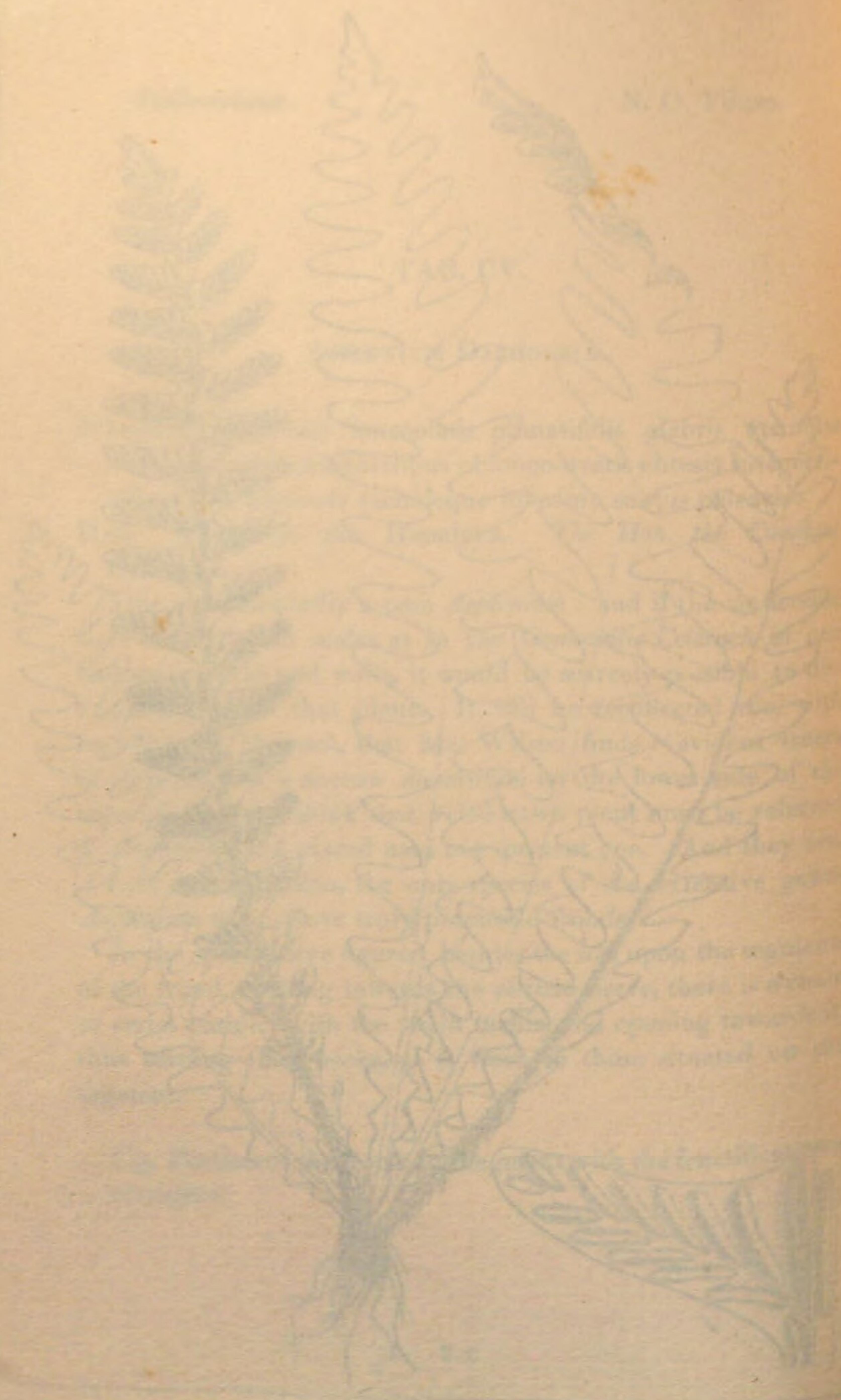
HAB. Simla, in the Himalaya. *The Hon. the Countess Dalhousie.*

This is undoubtedly a true *Asplenium* : and if the underside were covered with scales as in the *Grammitis Ceterach* of our European rocks and walls, it would be scarcely possible to distinguish it from that plant. It will be recollected too, with regard to *G. Ceterach*, that Mr. Wilson finds “evident traces of an involucre, a narrow membrane on the lower side of the sorus :” so that I think that well-known plant must be referred to *Asplenium* and placed next our present one. And they are, if I am not mistaken, the only species of the extensive genus *Asplenium* which have truly pinnatifid fronds.

In the species here figured, besides the sori upon the segments of the frond, opening towards the central nerve, there is a chain or series parallel with the main rachis, and opening towards it, thus turning their backs, as it were, to those situated on the segment.

Fig. Portion of the frond and segment with the fructifications :
—*magnified.*





Mathewsianæ.

N. O. Solanææ.

TAB. CVI.

ATROPA GLANDULOSA.

Caule suberecto fruticoso, foliis geminis cordato-ovatis longe petiolatis calyceque profunde 5-partito pubescenti-glandulosis, corolla longe tubulosa, stylo staminibusque inclusis.

Atropa glandulosa. *Hook. in Bot. Misc. v. 2. p. 230.*

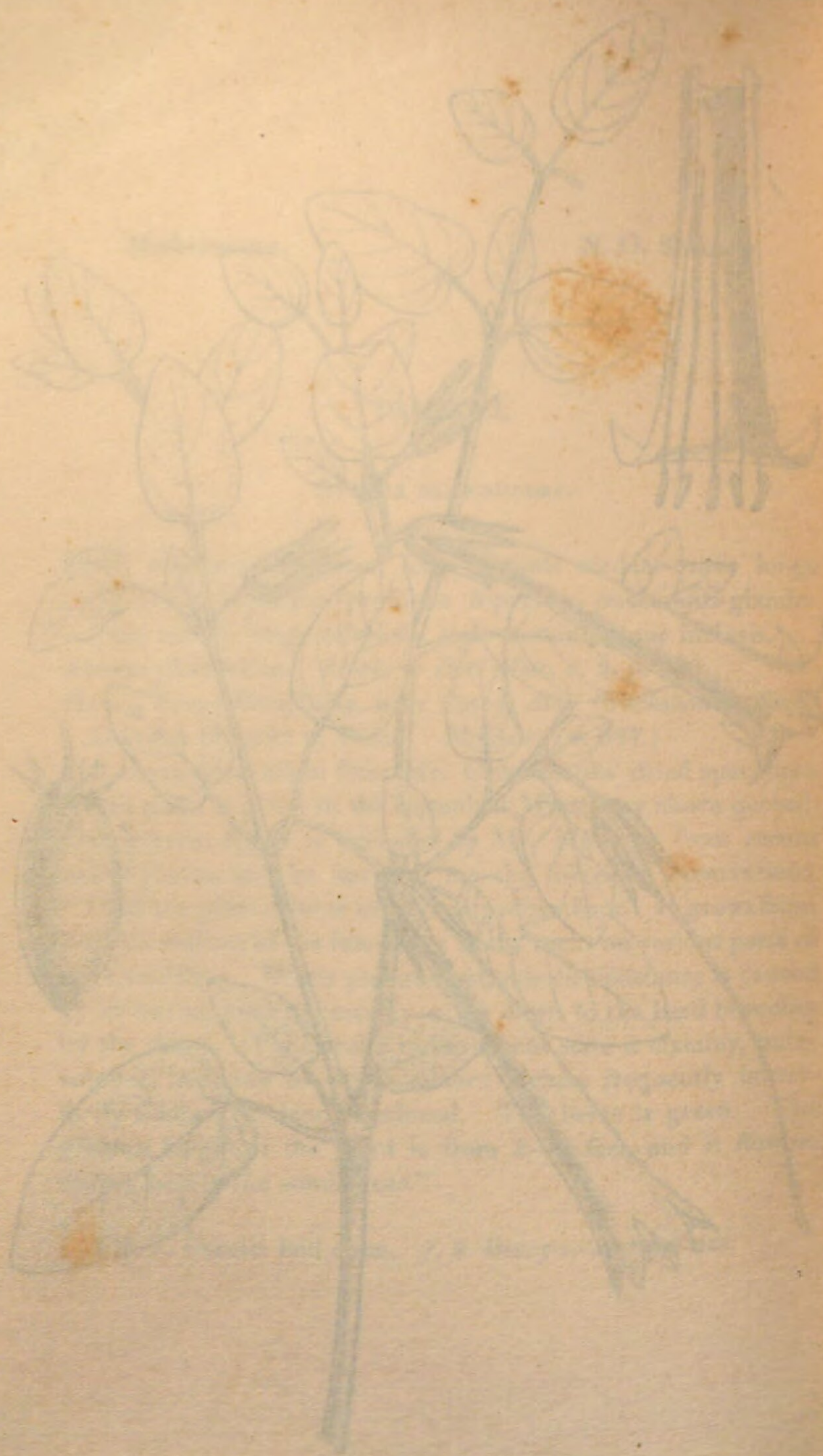
HAB. Peru; Huaylluay, near Pasco, *Alex. Cruckshanks, Esq.*

Crevices of rocks at Pasco. *Mathews (n. 667.)*

A description taken from Mr. Cruckshanks' dried specimens of this plant is given in the Botanical Miscellany above quoted. Our present figure is executed by Mr. Mathews from recent native plants, and he has sent me the following observations. "I find the plant oftener erect than procumbent. It grows from beneath and out of the interstices of the rocks on various parts of the Cordillera. When procumbent, this circumstance is caused by its having been repeatedly eaten down to the hard branches by the sheep. The corolla in the recent state is clammy, pale-sulphur, inclining to citron-colour: laciniae frequently imperfectly 3-lobed, at length reflexed. The berry is green. The greatest height of the plant is from 2—3 feet, and it flowers during nearly the whole year."

Fig. 1. Corolla laid open. *f.* 2. Berry :—*natural size.*





TAB. CVII.

ATROPA DEPENDENS.

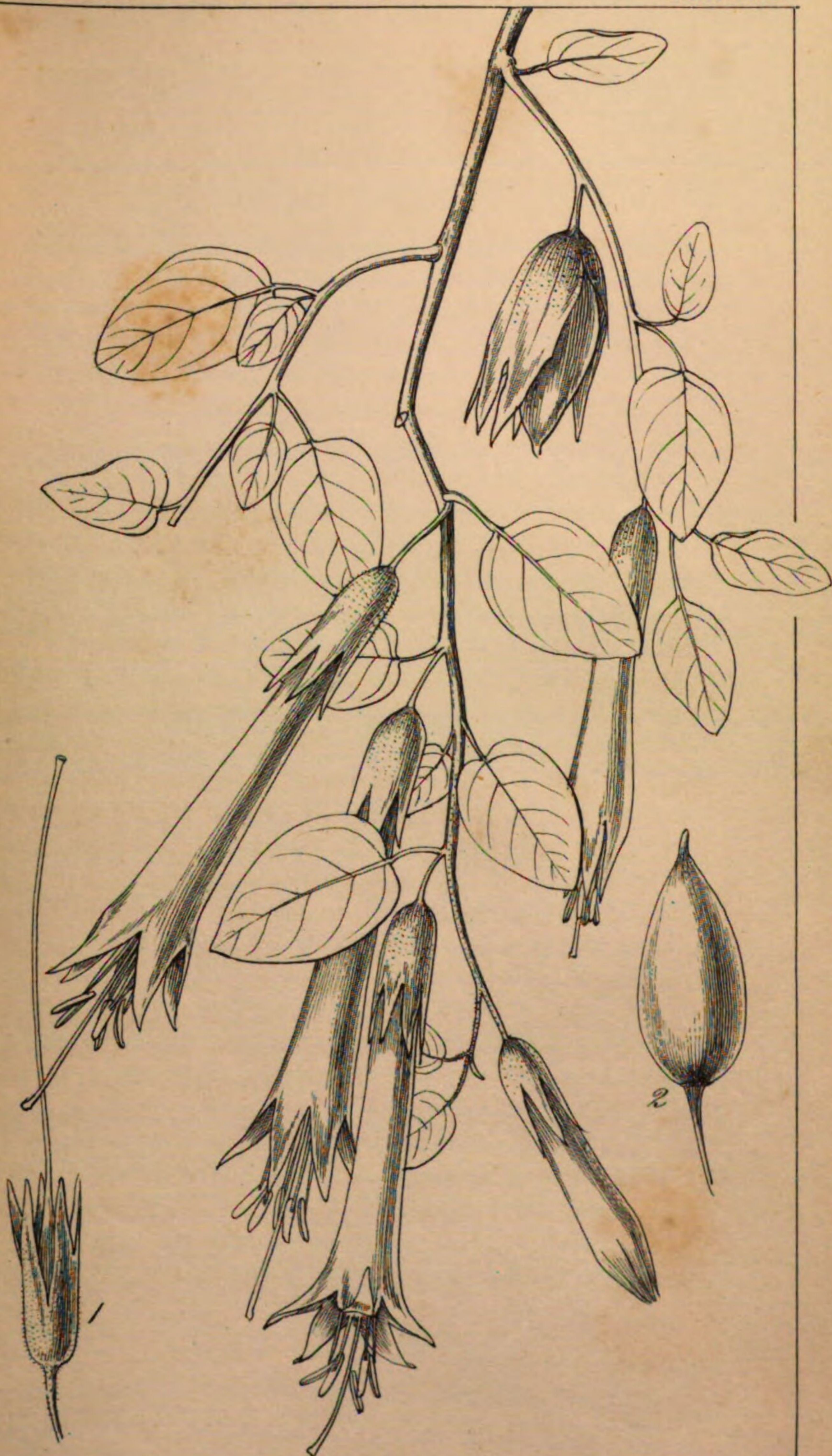
Caule pendente fruticoso, foliis geminis cordato-ovatis brevipetiolatis glabris, calyce tubuloso tenui-pubescente 5-fido demum (fructifero) ampliato hinc fisso bacca longiore, corolla longe tubuloso, stylo staminibusque exsertis.

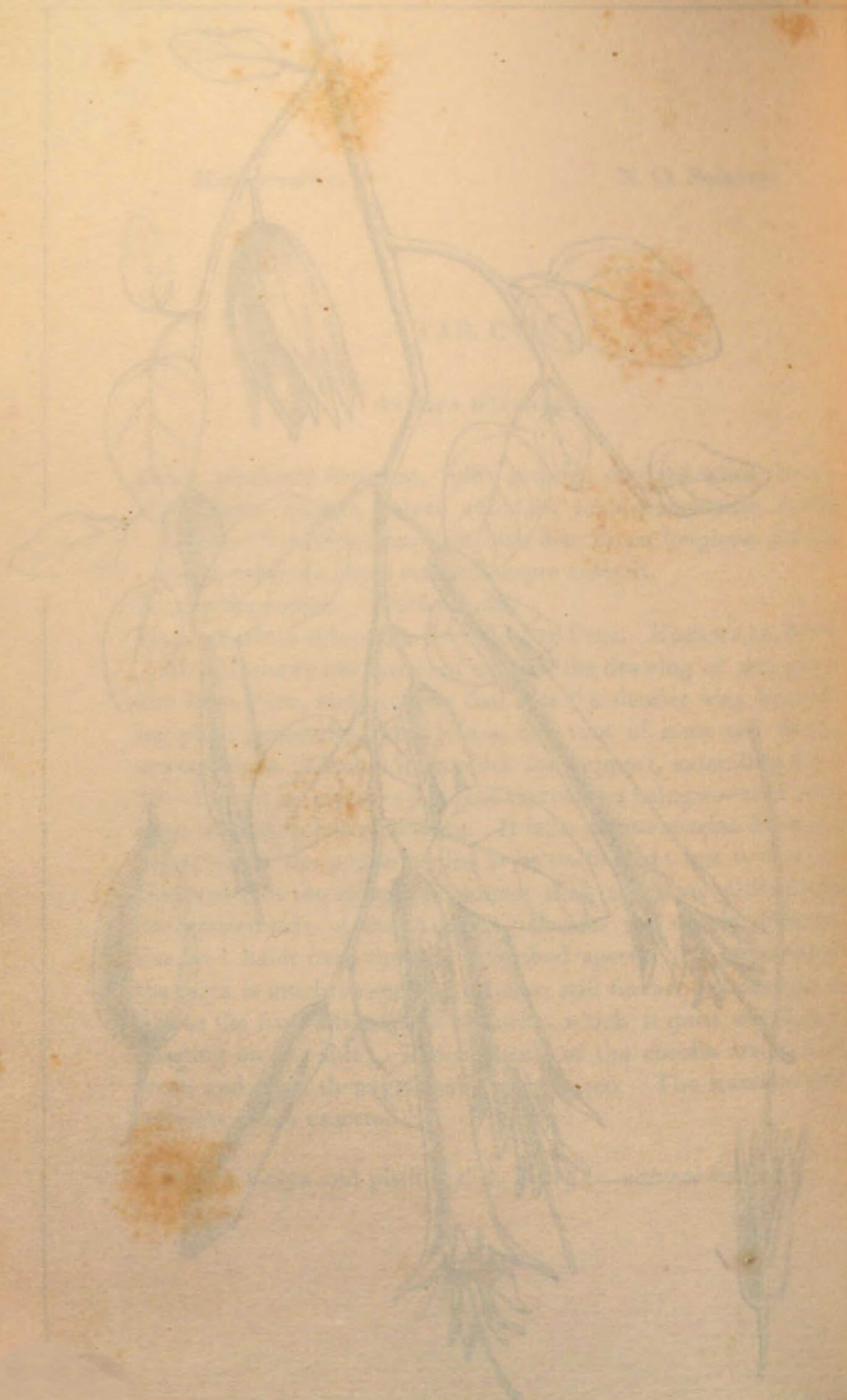
Atropa dependens. *Mathews mst.*

HAB. Eastern side of the Cordillera of Peru. *Mathews* (n. 829.)

Mr. Mathews has favoured us with the drawing of this plant also from Peru, and remarks that it is "a slender wiry branching plant generally growing from the root of some tall shrub, among whose branches it rambles for support, extending from 10—15 feet, its ultimate pendent extremities being covered with large sulphur-coloured flowers. It is an Alpine species, descending to where the potato begins to be cultivated: but it is to be observed that the climate is moister than the same altitude on the western side of the Andes." Besides the widely different size and habit from the last described species (*A. glandulosa*) the calyx is much larger and tubular, still further increasing in size as the fruit advances to maturity, which it quite envelopes, bursting on one side. The segments of the corolla are nearly erect, and all of them gradually acuminate. The stamens and style are much exserted.

Fig. 1. Calyx and pistil. *f.* 2. Berry :—*natural size.*





TAB. CVIII.

THIBAUDIA ELLIPTICA.

Ramis obtuse angulatis, foliis ellipticis obtusis mucronatis penninerviis brevissime petiolatis subtus sparsim punctatis, racemis densis glomeratis axillaribus terminalibusque, bracteis parvis, corollis cylindraceis, staminibus longitudine fere tubi, filamentis in urceolum omnino connatis, antheræ tubis longissimis poro terminali dehiscentibus.

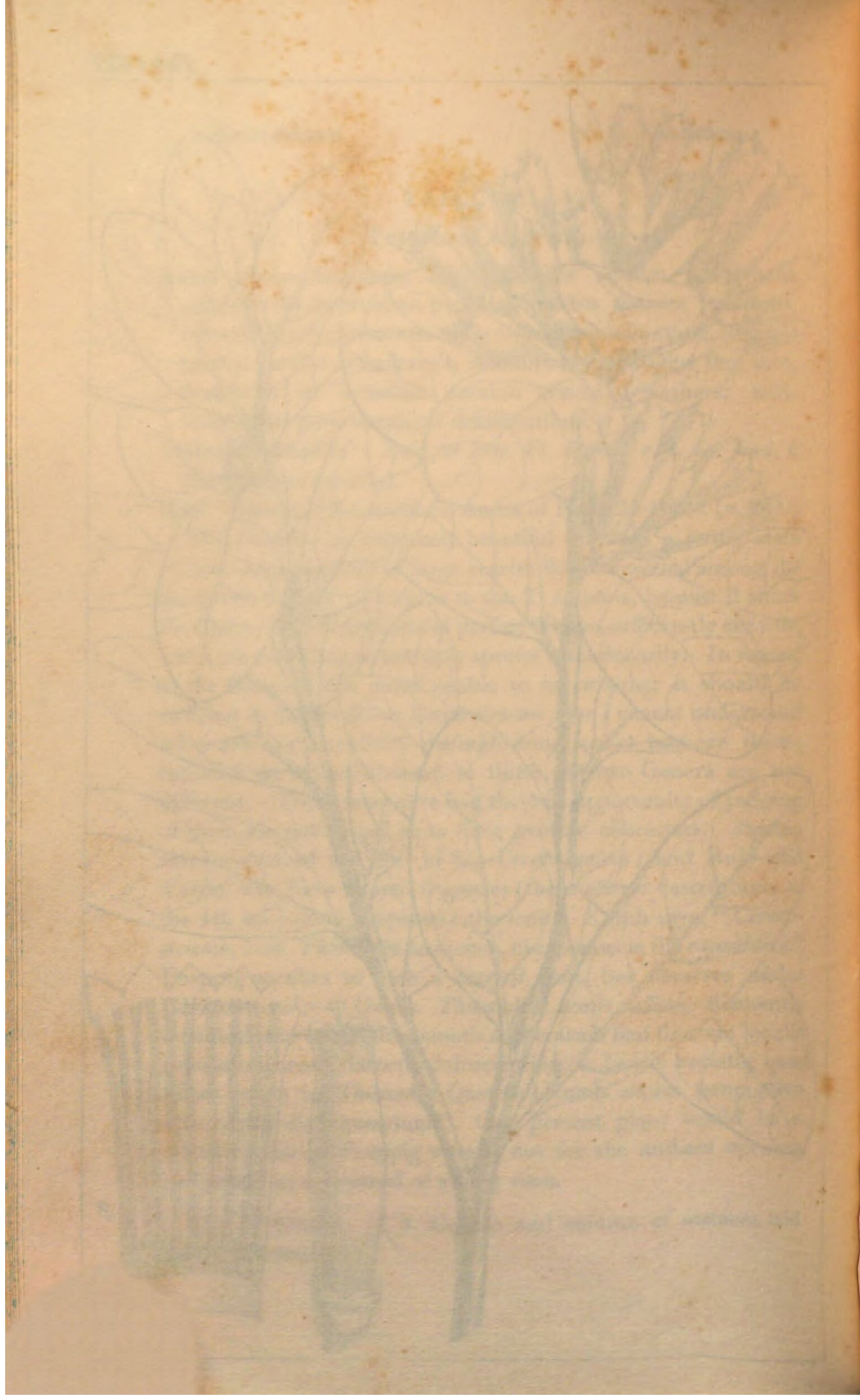
Thibaudia elliptica. Ruiz, et Pav. *Fl. Peruv. v. 4. Ic. ined. t. 383* (absque corollis).

HAB. Cuesta of Huanacabra, Andes of Peru. *Mathews. (n. 884.)*

This must be an extremely beautiful plant in a living state with its dense clusters of large scarlet flowers nestled among the evergreen foliage. I refer it to the *T. elliptica*, because I think the figure, though destitute of perfect flowers, sufficiently accords, and I am unwilling to multiply species unnecessarily. In regard to the Genus I am quite unable to say whether it should be referred to *Thibaudia* or *Ceratostemma*; for I cannot understand what are the essentially distinguishing marks between them: indeed I am rather inclined to think the two Genera are not different. Those who have had the best opportunity of judging of them are not agreed as to their generic characters. Jussieu was ignorant of the fruit of his *Ceratostemma*; and Ruiz and Pavon, who have figured 3 species (there are no descriptions to the 4th vol.) do not represent the fruit. Kunth says, "*Ceratostemma*, Juss. *Thibaudia* congener, nisi fructus in illa capsularis." Poeppig ascribes to both a *berried* fruit, but observes under *Ceratostemma*;—"Genus *Thibaudiæ* nimis affine, filamentis manifestius in urceolum connatis antherarum basi fixarum loculis rimula introrsum laterali dehiscentibus et baccis costatis, quæ tamen etiam in *Thibaudia Quereme* Humb. saltem pentagonæ sunt, ægre distinguendum." Our present plant would be a *Ceratostemma* of Poeppig were it not for the anthers opening by a small pore, instead of a long rima.

Fig. 1. Flower. *f.* 2. Corolla and column of stamens laid open:—*magnified.*





TAB. CIX.

MACLEANIA FLORIBUNDA.

GEN. CHAR. *Calyx* truncatus obsoletissime 5-dentatus, 5-alatus, inferne ovario adhærens. *Corolla* cylindræa, limbo 5-fido. *Stamina* decem basi corollæ inserta, filamentis per totam longitudinem in urceolum connatis. *Antheræ* basi affixæ, dorso muticæ, apice in tubum simplicem attenuatæ et rimula singula introrsum dehiscentes. *Ovarium* 5-loculare, multi-ovulatum. *Fructus* :—*Bacca*?—*Frutex habitu Thibaudia vel Ceratostemmatis*. Flores *numerosæ axillares secundi*. Folia *subsecunda*. Rami *cortice deciduo*.

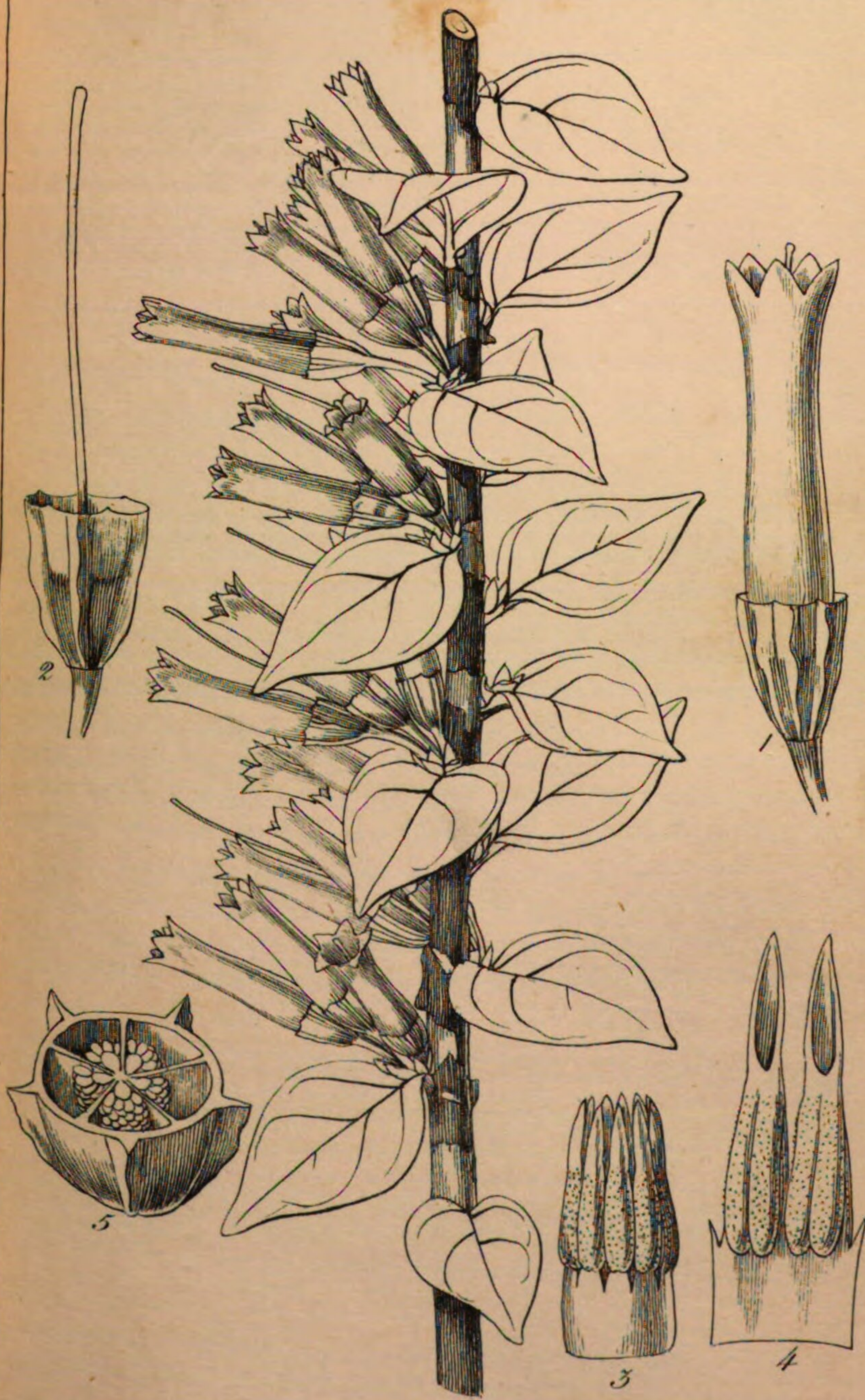
Macleania floribunda.

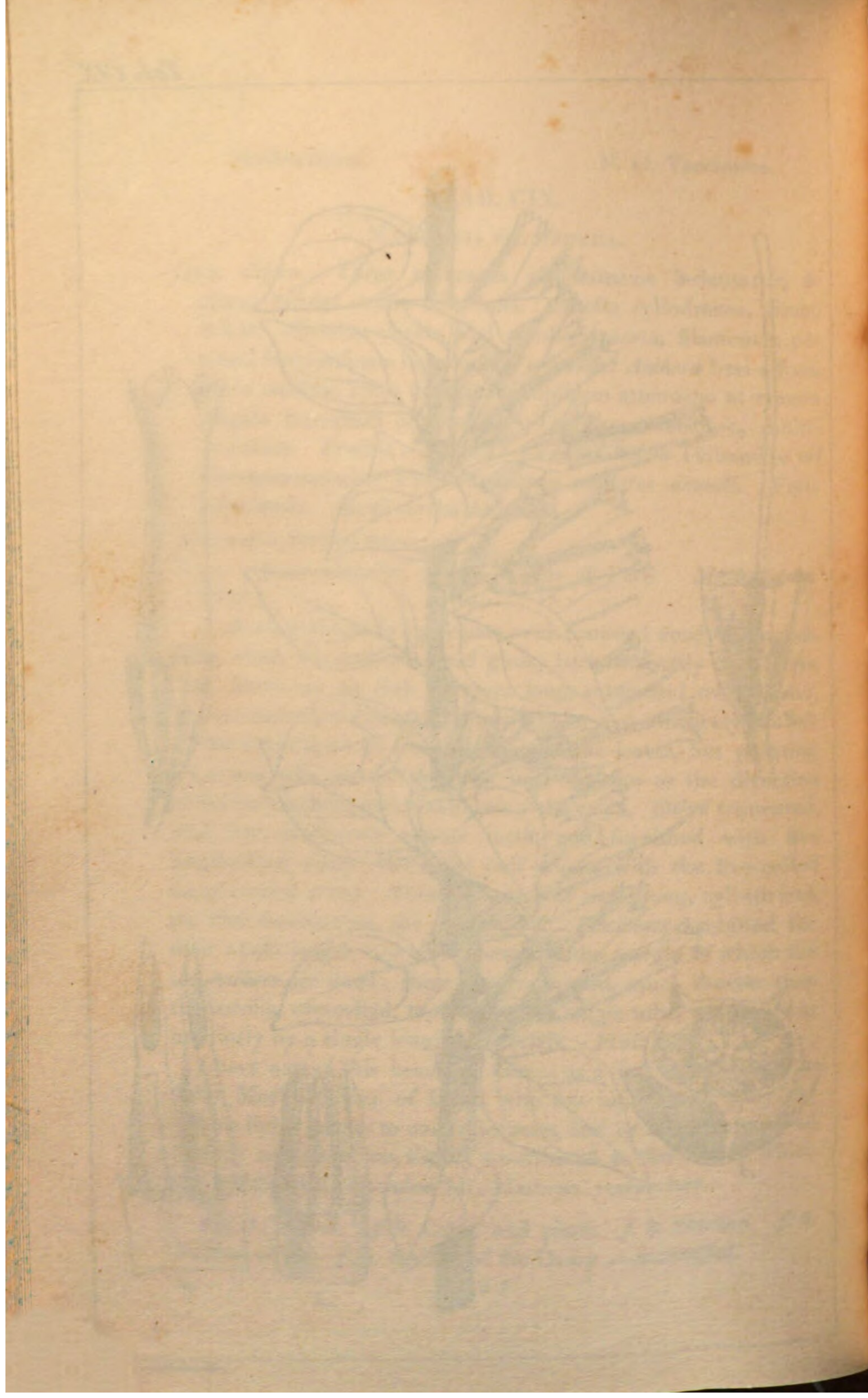
HAB. Jambrasbamba, in the Andes of Peru. *Mathews* (n. 1442.)

A *shrub*, glabrous in every part, with rounded woody branches, from which the dark-coloured glossy bark is readily deciduous. The *leaves* are an inch or more long, subsecund ovato-acute, feather-nerved, coriaceous, beneath paler and obscurely dotted. *Peduncles* in fascicles from the axils of the leaves, but pointing all to one side, and for the most part opposite to the direction of the leaves, short, articulated below the calyx. *Calyx* truncated, with five excessively minute teeth, and furnished with five longitudinal wings; the lower half adnate with the five-celled many-ovuled *ovary*. *Corolla* an inch or more long, cylindrical, the *limb* five-toothed, the *faux* hairy. *Filaments* combined for their whole length into a membrane, at the margin of which the ten *anthers* are fixed; these are granulated, much shorter than the corolla, two-celled, tapering into a single tube, which opens interiorly by a single longitudinal cleft. *Fruit*?

I have named this beautiful Genus as a just compliment to John Maclean, Esq. of Lima, who has introduced many excellent living plants to our collections, and by his generous and friendly assistance has mainly contributed to the success which has so eminently attended Mr. Mathews' researches.

Fig. 1. Flower. *f.* 2. Calyx and pistil. *f.* 3. Stamen. *f.* 4. Portion of do. *f.* 5. Section of the Ovary :—*magnified*.





TAB. IX.

THE DATA EXPANDED.

Table IX. - *Antennae of the male of the species of the genus of the subgenus of the family of the order of the class of the phylum of the kingdom of the animal world.*

1. *Antenna of the male of the species of the genus of the subgenus of the family of the order of the class of the phylum of the kingdom of the animal world.*

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Fig. 1. - *Antenna of the male of the species of the genus of the subgenus of the family of the order of the class of the phylum of the kingdom of the animal world.*

TAB. CX.

THIBAUDIA ANGUSTIFOLIA.

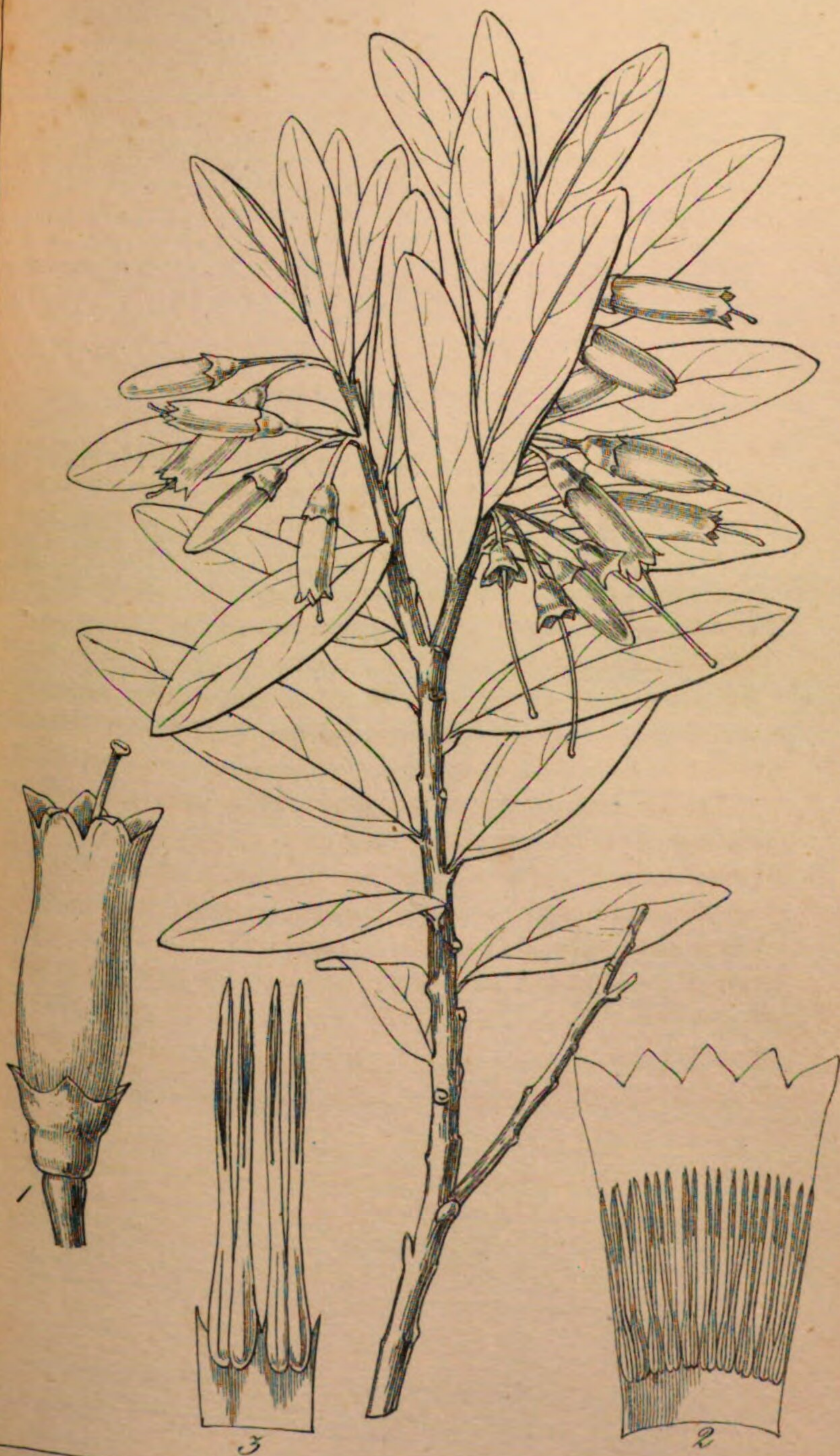
Foliis oblongo-lanceolatis acutiusculis subsessilibus obscure penninerviis marginibus recurvis serratis,* pedunculis axillaribus aggregatis pendulis basi parvi-bracteatis 1—3 floris, corolla brevi-cylindraceis, staminibus tubo brevioribus, filamentis in urceolum brevem connatis, antheræ tubis elongatis rima elongata dehiscentibus, stylo exserto.

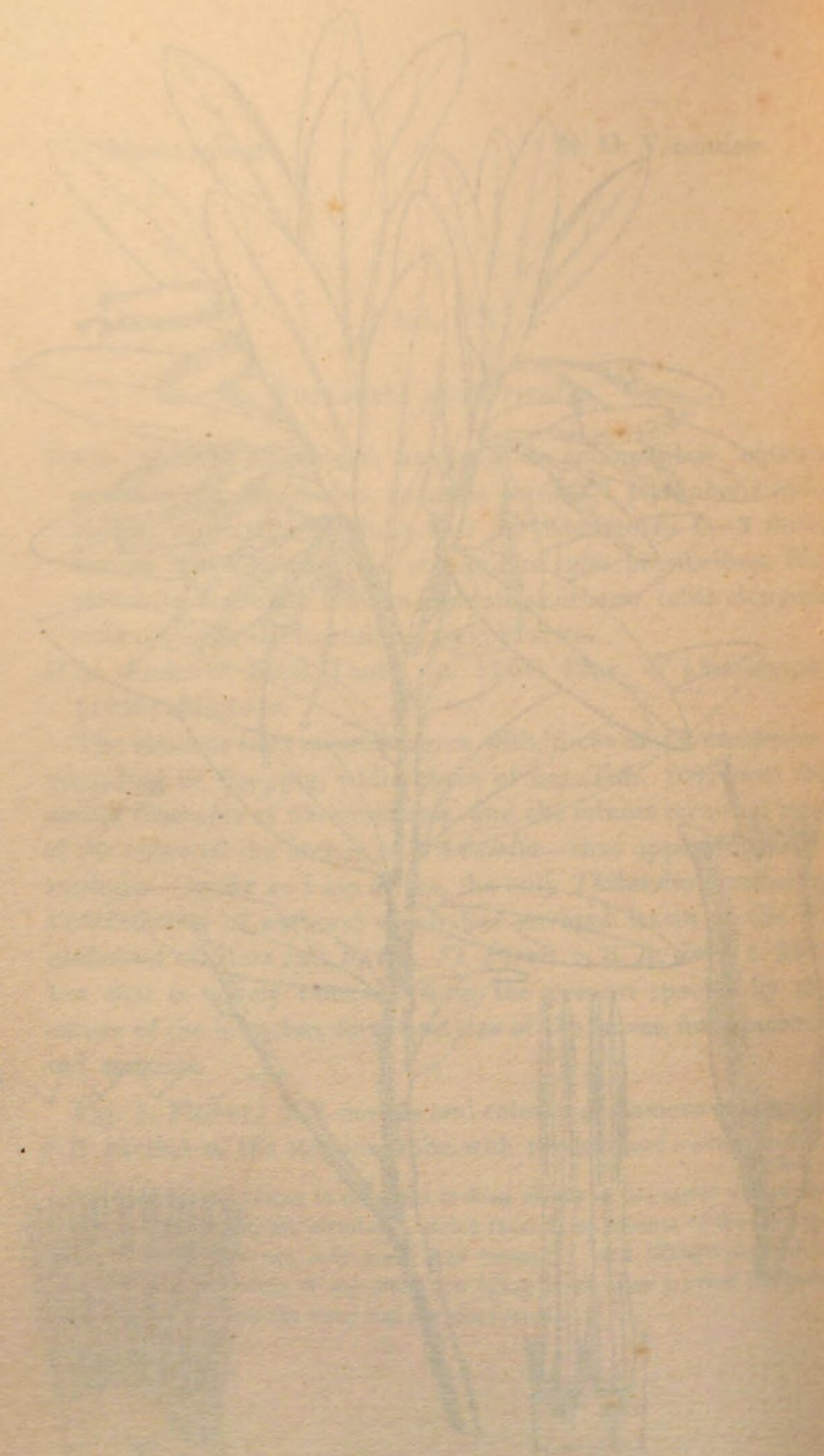
HAB. Andes of Peru. Taulia (n. 1443) Prov. of Chacapoyas. (1836) *Mathews*.

The stamens here entirely agree with those of *Ceratostemma*, according to Poeppig, while those of our Tab. 108, have the united filaments of *Ceratostemma* and the minute terminal pore of the tubes of the anther of *Thibaudia*—thus appearing intermediate. As far as I am aware, the only *Thibaudia* (including *Ceratostemma* of authors) which has serrated leaves is the *T. caulialata* of Ruiz and Pavon, *Fl. Peruv. v. 3. Ic. Ined. t. 386*; but that is widely removed from the present species by the nature of the branches, form and size of the leaves, inflorescence and stamens.

Fig. 1. Flower. f. 2. corolla and column of stamens laid open. f. 3. portion of the staminal tube with two anthers:—*magnified*.

* We regret that owing to the artist looking chiefly at the upper side of the leaves he has omitted the serratures, which indeed, on account of the recurvation of the margin, are only seen from beneath; and lithography unfortunately does not admit of any alteration being made after a proof has been taken, till which time the error was not discovered.





TAB. CXI.

THIBAUDIA ACUMINATA.

Foliis ellipticis basi acutis apice longe acuminatis subquintuplinerviis subtus punctatis, racemis axillaribus terminalibusque bracteatis, bracteis longitudine florum, corollis cylindraceis, staminibus longitudine corollæ liberis.

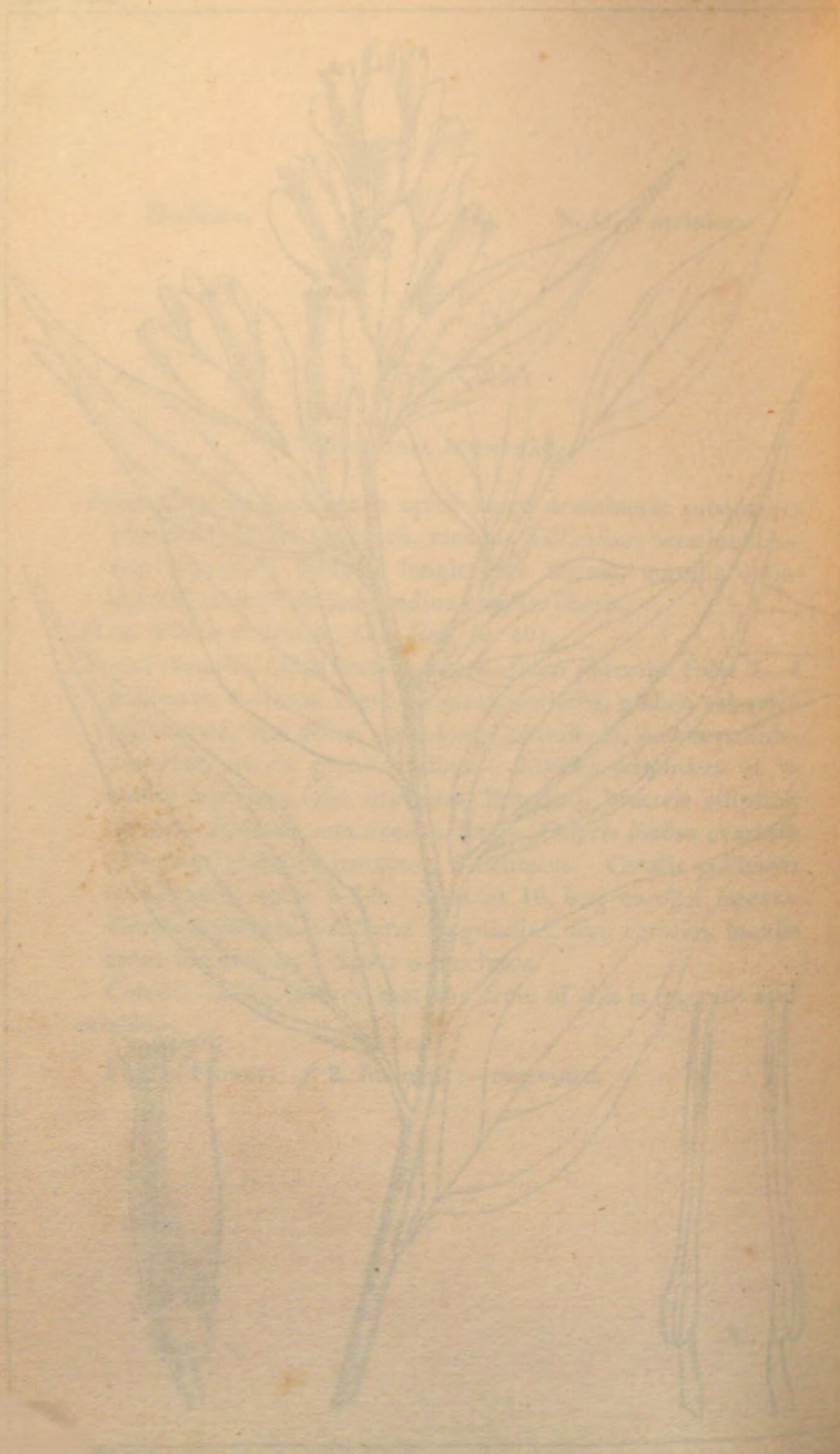
HAB. Plains of Quito. *Col. Hall.* (n. 40).

Frutex ramosus, ramis cortice cinereo-fusco obtectis. *Folia* 3—4 pollicaria, coriacea, brevi-petiolata, coriacea, glabra, subquintuplinervia, basi acuta, apice longe acuminata, subtus pallida, punctata, nervis prominentibus. *Racemi* terminales et in axillis supremis, folio breviores, bracteati, bracteis ellipticis obtusis. *Pedicelli* semiunciam longi. *Calycis limbus* ovarium globosum glabrum coronans, 5-dentatus. *Corolla* pollicaris cylindræa, apice 5-fida. *Stamina* 10, basi corollæ inserta. *Filamenta* brevia. *Antheræ* longitudine fere corollæ, loculis longe bicornubus. *Stylus* subinclusus.

Colonel Hall observes that the fruit of this is fragrant and eatable.

Fig. 1. Flower. *f.* 2. Stamens :—*magnified.*





TAIL CYCLE

STRUCTURE OF THE CYCLE

The cycle is a series of events, each of which is a separate unit of work. The cycle is a series of events, each of which is a separate unit of work. The cycle is a series of events, each of which is a separate unit of work.

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Mathewsianæ.

N. O. Vaccinieæ.

TAB. CXII.

SPHYROSPERMUM MYRTIFOLIUM.

Foliis ovato-lanceolatis acutis, ramis pedunculis calycibusque hirsutissimis, ovario quadriloculari.

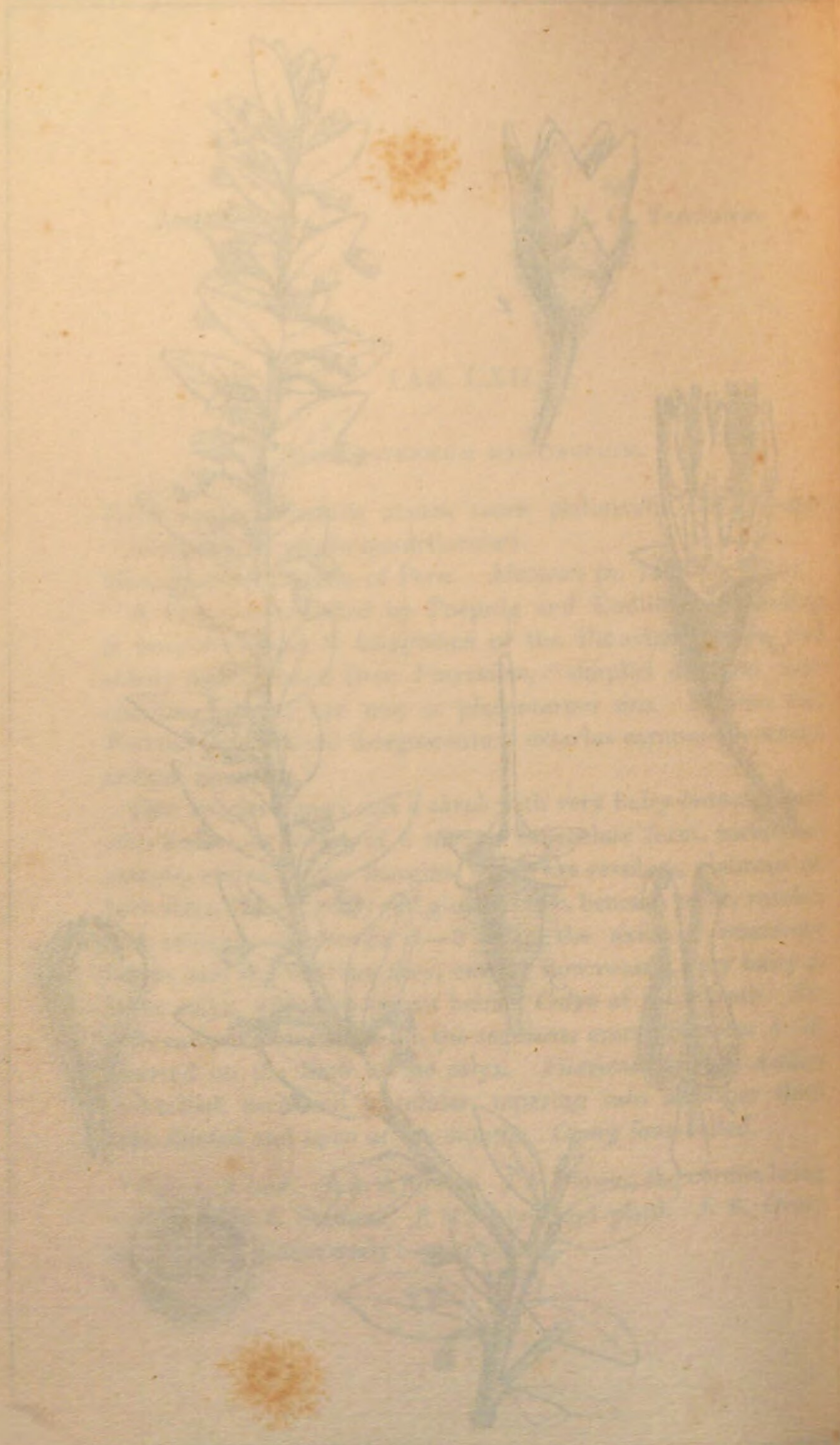
HAB. Bagasan, Andes of Peru. *Mathews* (n. 1466.)

A Genus established by Poeppig and Endlicher, including *S. buxifolium* and *S. longifolium* of the Peruvian Andes, and chiefly distinguished from *Vaccinium*, “simplici dentium calycinorum numero nec non et placentarum situ. Semina fere *Vaccinii Myrtilli*, sed integumentum exterius carnosum-succosum, arillum mentiens.”

Our species constitutes a *shrub* with very hairy *branches* and with numerous *leaves*, of a narrow lanceolate form, coriaceous texture, entire at the margins, which are revolute, glabrous on both sides, slightly veiny and glossy above, beneath paler, veinless and opaque. *Peduncles* 1—3 from the axils of numerous leaves, and shorter than they, curved downwards, very hairy as is the calyx, with long patent hairs. *Calyx* of 4—5 teeth. *Corolla* campanulate, 4—5-fid, the segments erect. *Stamens* 4—6, inserted on the limb of the calyx. *Filaments* short. *Anthers* two-celled, each cell glandular, tapering into a rather thick tube dilated and open at the mouth. *Ovary* four-celled.

Fig. 1. A bud. *f.* 2. A flower. *f.* 3. Flower, the corolla being removed. *f.* 4. Stamen. *f.* 5. Calyx and pistil. *f.* 6. Ovary cut through transversely :—*magnified*.





N. O. Anderson

TAB. CXXII.

Alnus (Fraxinus) americana

Section of the tree showing the internal structure of the wood. The wood is composed of annual rings, each consisting of a narrow band of early wood and a wider band of late wood. The late wood is characterized by its dense, dark color and the presence of numerous small, dark spots, which are the remains of the cells that have died. The early wood is lighter in color and consists of larger, more open cells. The boundary between the early and late wood is called the growth ring. The growth rings are separated by thin lines of resin, which are the remains of the cells that have died. The resin is a natural product of the tree and is used to protect the wood from decay and insect attack. The growth rings are a valuable tool for determining the age of the tree and for studying the growth habits of different species. The growth rings can also be used to study the effects of environmental factors, such as climate and soil, on the growth of the tree. The growth rings are a record of the tree's life and can provide valuable information about the history of the tree and the environment in which it grew.

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TAB. CXIII.

APHELANDRA ACANTHIFOLIA.

Sericeo-pubescens, foliis late ovato-lanceolatis acuminatis grosse serratis apice serraturisque spinescentibus, petiolis brevissimis ad basin spinosis, spicis terminalibus aggregatis densifloris, bracteis ovatis sepalisque lanceolatis apice spinescentibus, corolla sericea, staminibus styloque exsertis.

HAB. Province of Chacapoyas, Peru. *Mathews*, 1836.*

Planta singularis, pulcherrima. *Folia* spithamæa, penninervia, nervis approximatis numerosis. *Spicæ*, in nostro exemplari, ternæ, pedunculatæ. *Bracteæ* majusculæ, concavæ, ciliatæ, calyce majores. *Corolla* 2—2½ uncias longa, sericea, tubulosa; limbo bilabiato, labiis patentibus, superiore bifido, inferiore trifido, lacinia intermedia majore, concava, subcymbiformi, acuta. *Stamina* 4, exserta. *Antheræ* lineares, 1-loculares. *Stylus* filiformis, staminibus longior. *Capsula* longitudine bracteæ persistentis, elliptica, substantia dura, nitida, bicularis, bivalvis. *Loculi* dispermi. *Semen* ovale, punctatum, singulo retinacula carnosâ sustentato.

Fig. 1. Flower. *f.* 2. Capsule. *f.* 3. One of the valves with two seeds :—*magnified*.

* The only collection that came in 1836 was unfortunately not numbered by Mr. Mathews.



TAB. CXIV.

ESCALLONIA POLIFOLIA.

Pubescens glutinosa, foliis lineari-oblongis marginibus recurvatis integerrimis supra nudiusculis subtus dense pubescentibus, pedunculis solitariis terminalibus unifloris longitudine foliorum, calycis tubo subhemisphærico brevi glanduloso dentibus e lata basi subulatis.

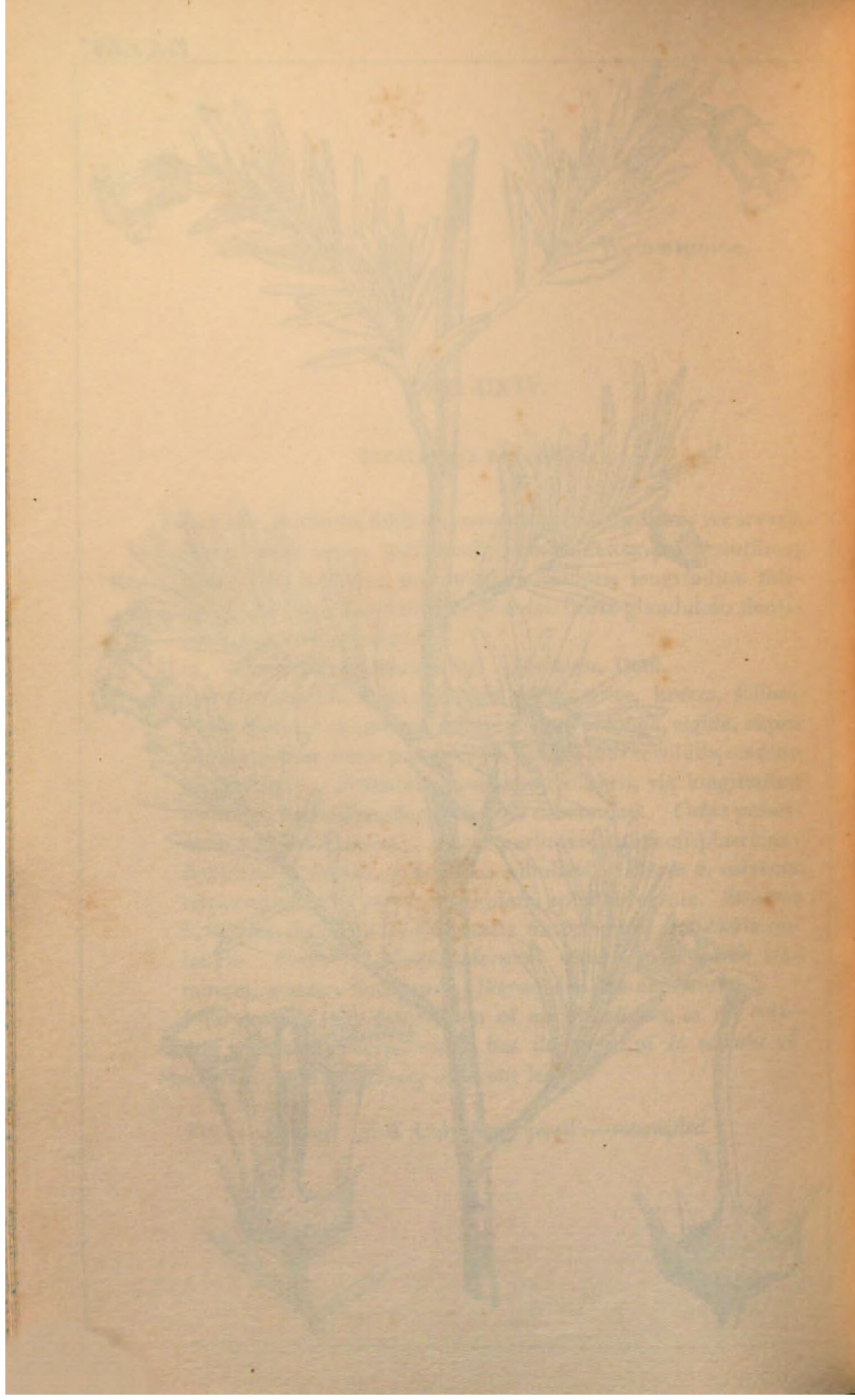
HAB. Province of Chacapoyas. *Mathews*, 1836.

Rami glabriusculi, fusci; ramuli pubescentes, breves, foliosi. *Folia* sparsa, vix unciam longa, lineari-oblonga, rigida, supra læviter subtus dense pubescentia, marginibus revolutis, omnino integerrimis. *Pedunculi* terminales, solitarii, vix longitudine foliorum, cernui, uniflori, superne tuberculati. *Calyx* pubescens, tuberculatusque. *Tubus* perbrevis, subhemisphæricus: dentibus 5, erectis, e lata basi subulatis. *Petala* 5, calycem triplo excedentia, erecta, spathulata, apice recurvata. *Stamina* 5, corolla breviora: *Filamentis* filiformibus: *Antheris* oblongis. *Ovarium* subsemiinferum: *Stylus* longitudine staminum, crassus, flexuosus: *Stigma* dilatato-capitatum.

I do not find any description of an *Escallonia*, at all coinciding with this species, which has the habit of *E. serrata* of Smith, but with extremely different leaves.

Fig. 1. Flower. f. 2. Calyx and pistil:—*magnified*.





TAB. CXV.

GYMNOGRAMMA VESTITA.

Tota stipite rachi frondibusque pinnatis (subtus præcipue) pilis fulvis copiosis sericeis vestita, fronde pinnata, pinnis subcordato-ovatis brevissime petiolatis obtusis, soris copiosis obliquis furcatis.

Grammitis vestita. *Wall. Cat. of Pl. in E. I. C. Mus. (n. 12.)*

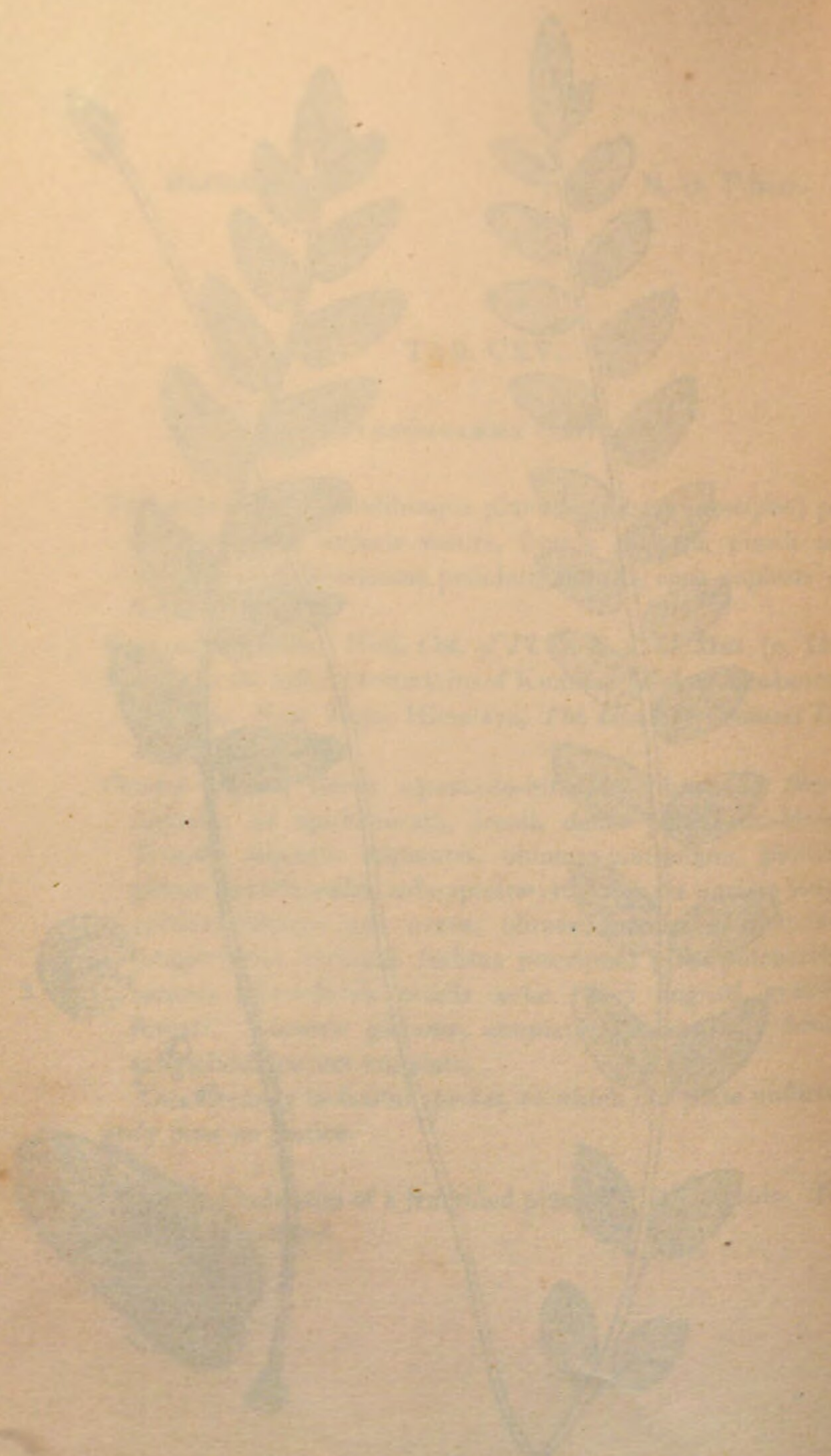
HAB. On the loftiest mountains of Kumaon (*Robert Blenckworth*), *Wallich*. Near Tago, Himalaya, *The Hon. the Countess Dalhousie*.

Caudex repens, dense squamoso-hirsutus, fibrosus. *Stipites* digitales ad spithamæam, erecti, dense pubescenti-hirsuti. *Frondes* stipitem æquantes, oblongo-lanceolatae, pinnatae, pinnæ remotiusculæ, suboppositæ; majores vix unciam longæ, cordato-oblongæ seu ovatae, obtusæ, brevissime petiolatae, integerrimæ, utrinque (subtus præcipue) pilis pulcherrime sericeis aureo-fulvis nitidis tectæ. *Sori* angusti, graciles, furcati. *Capsulæ* globosæ, annulatae, subsessiles. *Semina* subglobosa, parum angulata.

An extremely beautiful species, to which our plate unfortunately does no justice.

Fig. 1. Underside of a fructified pinna. f. 2. Capsule. f. 3. Seeds :—*magnified*.





THE GIFT

Presented to the
Library of the
University of
Cambridge
by the
Hon. the
Rev. the
Vice-Chancellor
of the University
of Cambridge
in the year
1848

THE GIFT

TAB. CXVI.

ADENARIA PARVIFOLIA.

Ramulis foliisque junioribus præcipue ad nervos pubescentibus, foliis oblongis utrinque attenuatis brevi-petiolatis glabris subtus pallidioribus nigro-punctatis subcoriaceis, umbellis brevipedunculatis, calycibus 4-fidis, staminibus inclusis.

HAB. Prov. of Chacapoyas, Peru. *Mathews*, 1836.

Frutex, ramis ramulisque subteretibus, junioribus tenuiter pubescentibus. *Folia* opposita, sesquiunciam longa, subcoriacea, penninervia, vix reticulata, oblonga, acuminata, integerrima, basi in petiolum perbreve attenuata, glabra, subtus pallida, nigropunctata. *Umbellæ* axillares, plurifloræ, pedunculatæ, pedunculo pedicellisque 2 lineas longis. *Calyx* turbinatus, petalisque oblongo-spathulatis, extus glandulis majusculis punctatus. *Stamina* 8, brevia, calyci infra medium inserta. *Ovarium* subglobosum, supra hirsutum, nigro-glandulosum, inferne nudum, in stipitem brevem attenuatum: *Stylus* longitudine ovarii: *Stigma* bilobum. *Capsula* calyce persistente semitecta, globosa, indehiscens? bilocularis. *Receptacula* dissepimento affixa. *Semina* numerosa, parva.

If this plant be compared with the specific character alone of *Adenaria griseoides* H. and K. (from the banks of the Magdalena) it will be found almost entirely to agree; but besides the widely different locality of the two, we find from the *description*, that Humboldt's plant has the leaves "32—36 lines long, thin and membranaceous, reticulated with veins and the stamens exserted:" hence I am led to consider the present as a new species. A second of the genus has been sent by Mr. Mathews, among his earlier collections, from the Quebrada of Panahuanca, n. 824; the *Adenaria floribunda* H. and K. It is a tree, 15—20 feet high, the flowers and leaves larger than in our present species, the latter as well as the branches and umbels very downy.

Fig. 1. Flower. *f.* 2. Calyx laid open with the stamens. *f.* 3. Pistil. *f.* 4. Capsule cut open:—*magnified*.



TAB. CXVII.

Platanus, Florida.

Both ovules plane, sides rounded, like the ovule of *Platanus*.
 The *Platanus* of Florida and Cuba (see *Bot. Amer.* 1845, p. 11) are much more slender than the *Platanus* of Texas and Louisiana. From the slender stem and by no means lateral leaves and by the few (upper) only (lower) 2-3 flowered spikes. The spikes are slightly grooved and flattened; the lobes, very slightly differing in form from the petals) is distinct of lobes, which have been considered as essential characters of the genus; but Professor Lindley doubts whether these characters by themselves are not so much by mistake.

Fig. 1. Single flower. Fig. 2. Single flower, side view. Fig. 3. Calyx and petals. Fig. 4. Longitudinal section of the ovary.

TAB. CXVII.

PACHYPHYLLUM PARVIFOLIUM, *Lindl.*

Foliis ovalibus planis, spicis subæqualibus, labello mutico. *Lindl.*

HAB. Chacapoyas, Peru. *Mathews*, 1836.

Hitherto only one species of this Genus has been described, the *P. distichum* of Humboldt and Kunth (*Nov. Gen. et Sp. v. 1. t. 77.*) an inhabitant of Loxa and Gonzana in Peru. From that our plant is abundantly distinguished by its much slenderer stems, smaller and by no means falcate leaves, and by the few (apparently constantly) 3-flowered spikes. The sepals are singularly grooved and carinated: the labellum, (scarcely differing in form from the petals) is destitute of tubercles, which have been considered an essential character of the Genus: but Professor Lindley doubts whether those represented by Humboldt are not so done by mistake.

Fig. 1. Spike of flowers. *f.* 2. Single flower, side view. *f.* 3. Column and petals. *f.* 4. Lateral sepal. *f.* 5. Pollen-mass:—*magnified.*





TAB. CXVIII.

HARVEYA CAPENSIS.

GEN. CHAR. *Cal.* inflato-campanulatus, basi truncatus, 5-fidus, 10-costatus, segmentis acutis marginibus recurvis. *Cor.* ringens, tubo exserto, curvato, superne inflato, fauce compressa, limbo bilabiato 5-fido, sinubus obtusis, laciniis $\frac{2}{3}$ obovatis, undulatis. *Stam.* 4, didynama, medio tubi inserta, inclusa; *Filamenta* brevia, glanduloso-pilosa; *Antheræ* biloculares, loculo unico fertili, ovato, acuminatissimo, apice poro dehiscente; altero (inferiore) abortivo, subulato, duplo longiore. *Ovarium* ovatum, biloculare; placentis 4 dissepimenti medio affixis, *Stylus* erectus, exsertus. *Stigma* capitatum. *Fructus*?—Herba *parasitica, simplex v. ramosa, aphylla, pilis glandulosis fulvis subviscidis ubique obsita.* Caulis *squamosus, squamis oppositis.* Flores, *ex axillis squamarum superiorum, magni, pallide rosei.* Pedicelli *infra calycem bibracteati.*

Harveya Capensis.

HAB. On a dry hill between Wynberg and the Camp ground, parasitical on the roots of *Blairea muscosa* and other small Heaths, not uncommon, flowering in January. Since found in plenty in various sandy places on "the Flats." Hon. W. H. Harvey. I have also received specimens from Dr. Thom, M. Villet, and Dr. Sieber.

This remarkable plant I am anxious should bear the name of the Hon. W. H. Harvey, Treasurer of the Colony, Cape of Good Hope, who during his former brief visit to Southern Africa amassed a very valuable collection, which has been distributed among his friends with the liberality of a Wallich and a Wight, and who is already well known by his admirable descriptions of Algæ. To him I am indebted for specimens of the present plant and for an excellent figure, analysis, and description: but I am unable to refer it to any known Genus. It has the habit of *Orobanchæ* and it may be included among the imperfectly described species of *Orobanche* of Thunberg: but the structure of the ovary forbids its being united with that family. I refer it to *Scrophularinæ*, though I am unable to say in which of the sections of Mr. Bentham it should be placed; perhaps among *Buchnereæ*.

Fig. 1. Calyx and bractæas. f. 2. Corolla. f. 3. The same laid open. f. 4. Stamen. f. 5. Pistil (nat. size). f. 6. Ovary cut open:—all but f. 5, more or less *magnified*.



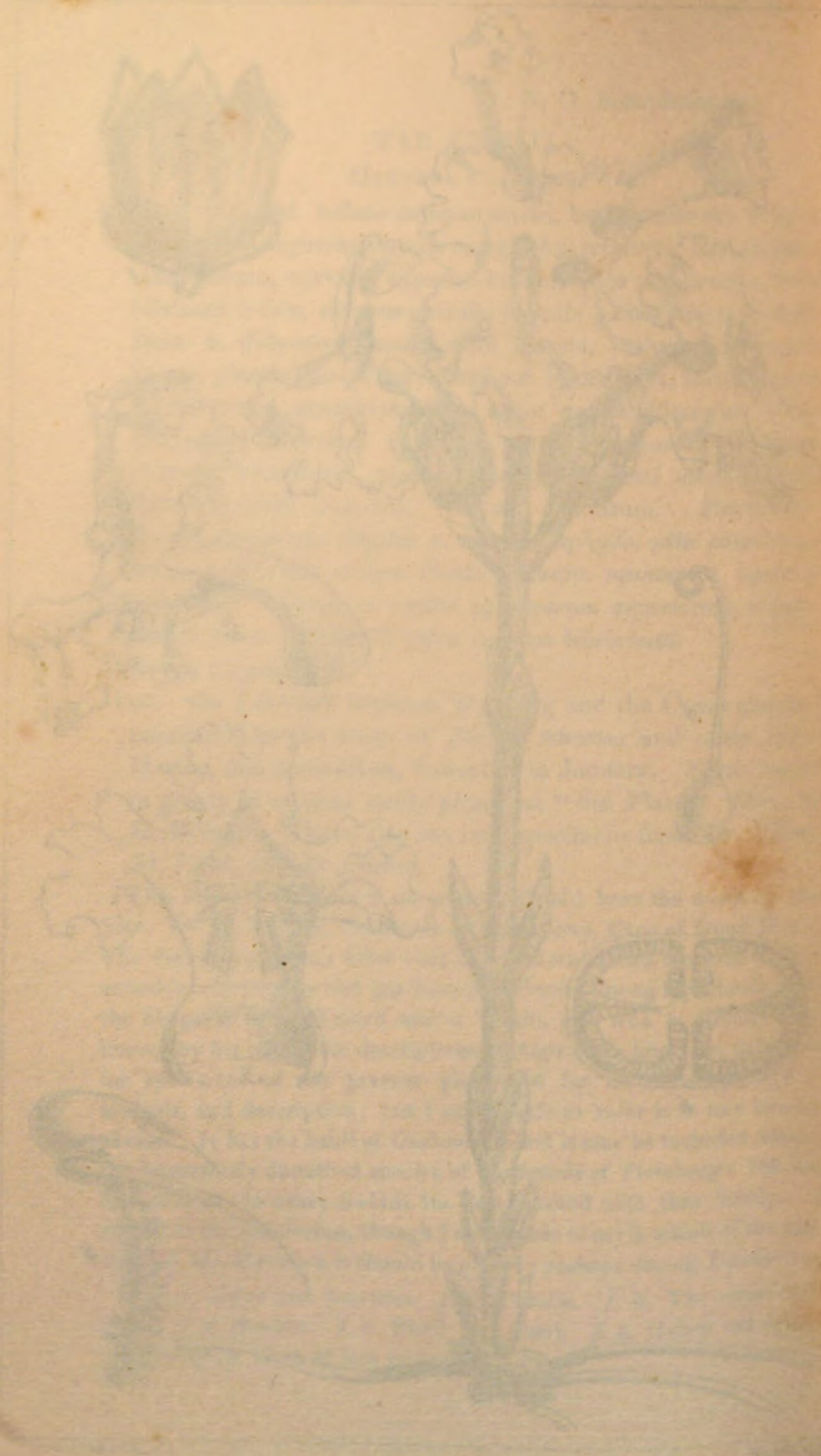


PLATE I

PLATE II

PLATE III

PLATE IV

PLATE V

PLATE VI

PLATE VII

PLATE VIII

TAB. CXIX.

PTERIS FLEXUOSA.

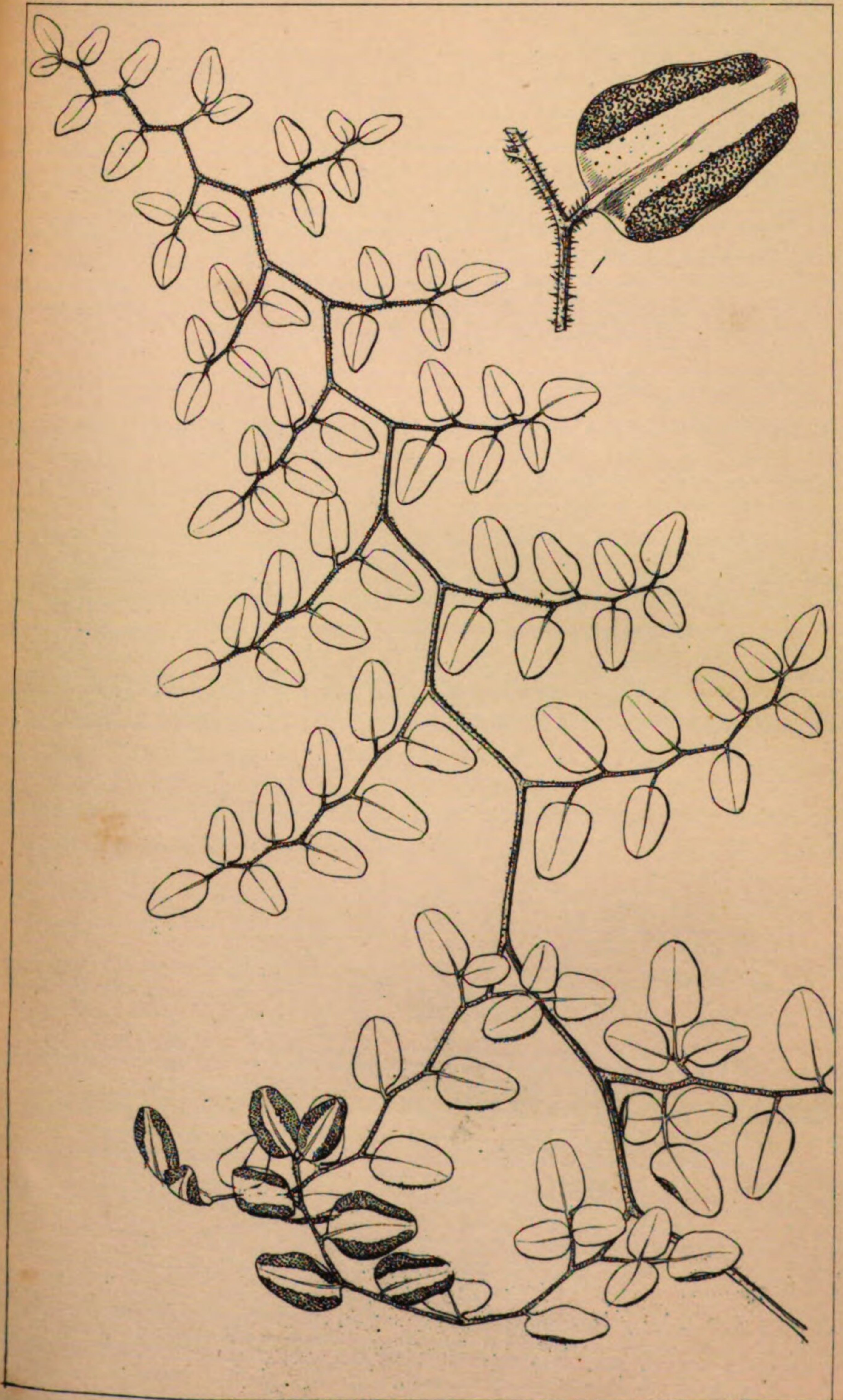
Fronde bi- subtri-pinnata, pinnulis petiolatis cordato-ovatis obtusis, rachidibus omnibus insigniter flexuosis junioribus pubescenti-hispidis, soris ad margines laterales continuis vix ad apicem attingentibus.

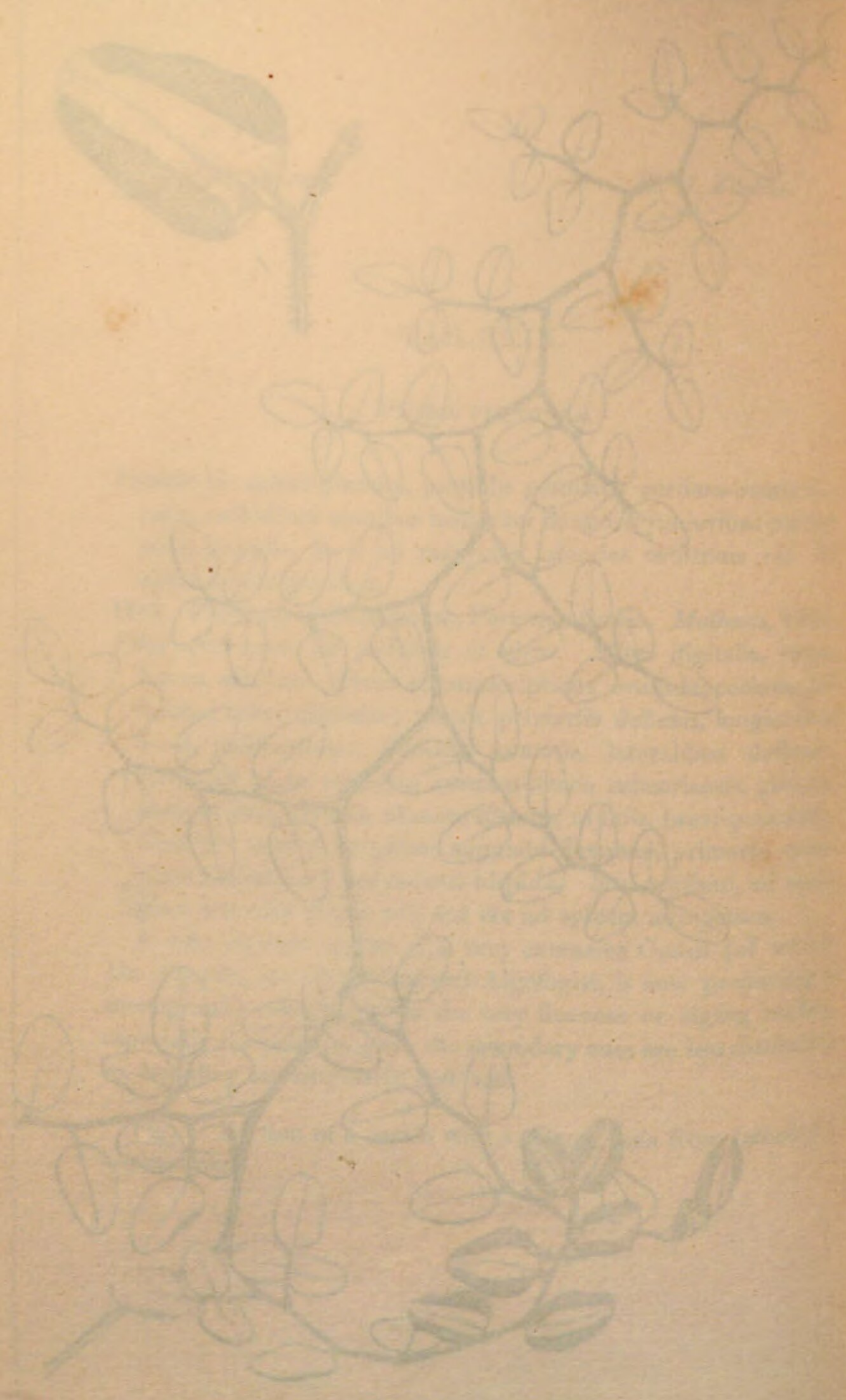
HAB. Province of Chacapoyas, Peruvian Andes. *Mathews*, 1836.

Filix spithamæa ad pedalem et ultra. *Stipes* digitalis, teres, fuscus, nitidus. *Frons* circumscriptione ovato-lanceolata, bi-inferne subtri-pinnata; pinnis primariis deflexis, longioribus 3—4 pollicaribus; pinnulis remotis, lateralibus deflexis, terminali recta, omnibus cordato-ovatis subcoriaceis, glabris, obtusis, integerrimis, obscure costatis, aveniis, brevi-petiolatis. *Rachides* omnes insigniter angulato-flexuosæ, primaria præcipue; secundaria pubescenti-hispida. *Sori* continui, ad margines laterales pinnæ siti, sed vix ad apicem attingentes.

A most distinct species of a very extensive Genus (of which Dr. Agardh, son to the learned Algologist, is now preparing a monograph) remarkable for the very flexuose or zigzag rachis, especially the primary one: the secondary ones are less distinctly so, but they are singularly deflexed.

Fig. 1. Portion of a rachis with a pinna, seen from beneath:—*magnified*.





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Wightianæ.

N. O. ~~Gapparideæ.~~

Papilionaceæ

TAB. CXX.

TEPHROSIA SUBEROSA.

Arborescens erecta ramosa, ramis junioribus tomentosis, cortice suberoso-rimosa, foliis pinnatis, foliolis 6—10 jugis elliptico-oblongis obtusis mucronulatis supra glabris nitidiusculis subtus sericeis, racemis terminalibus, floribus speciosis geminis longe pedicellatis, calycis campanulati dentibus brevibus, carina rectiuscula, vexillo pubescente, stylo glabro, leguminibus longis rectis sericeo-pubescentibus inter semina constrictis. *W. et A.*

Tephrosia suberosa. *De Cand. Prodr. v. 2. p. 249. Wall. List, n. 5628. Wight, Cat. n. 882, 883. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 210.*

T. sericea. *De Cand. l. c. (non Pers. nec De Cand. l. c. p. 255) Wall. List, n. 5629.*

Cytisus sericeus. *Willd. Sp. Pl. v. 3. p. 1121.*

Robinia suberosa. *Roxb. Fl. Ind. v. 3. p. 327.*

R. sennoides. *Roxb. Fl. Ind. v. 3. p. 328.*

HAB. Alpine valleys in Mysore, Madura, Tinnevelley and Northern Circars (not in Tranquebar). *Dr. Wight.*

Flowers large, of a deep purple rose colour.

Fig. 1. Portion of a valve of the Legumen, with seeds.





TAB. CXLI.

POCYPHUS BRACHYCEPHALUS

Pluteus. Testaceous, pinnate, with numerous pectinate
 points approximating posteriorly linear-lanceolate inferiorly
 and part uterine, marginalis supra pectinatus, subus
 caudatus, quibus pectinibus, totis copiosis, sub-
 lateris costis et marginem.

117. Chacapoyas, Peru. Holm, 1838.

The tube is about 6 inches long, terete, dark brown, opaque,
 slightly downy. The fructifications are exceedingly copious,
 occupying nearly the whole underside of the plant, and through-
 out the whole length of the frond.

Mathewsianæ.

N. O. Filices.

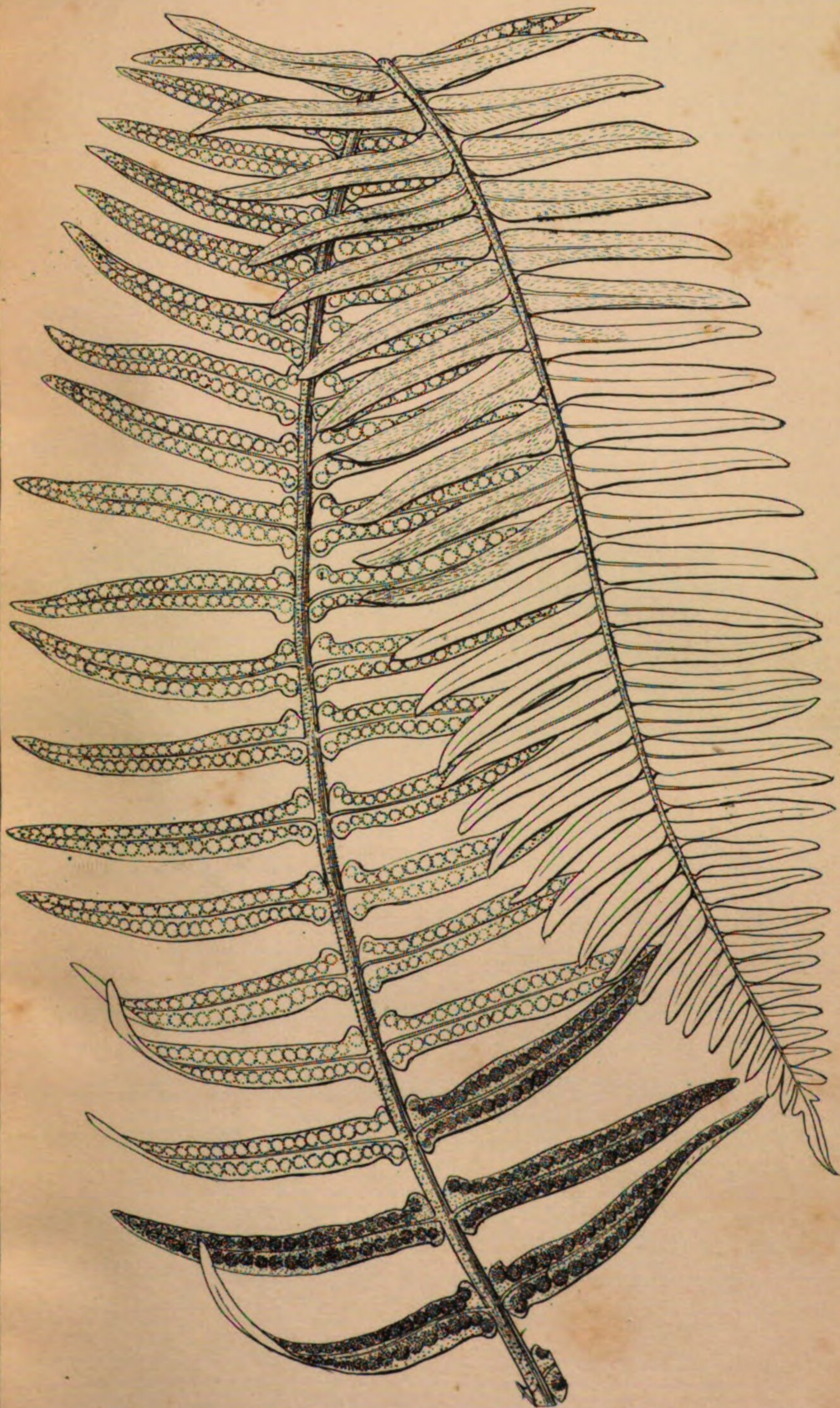
TAB. CXXI.

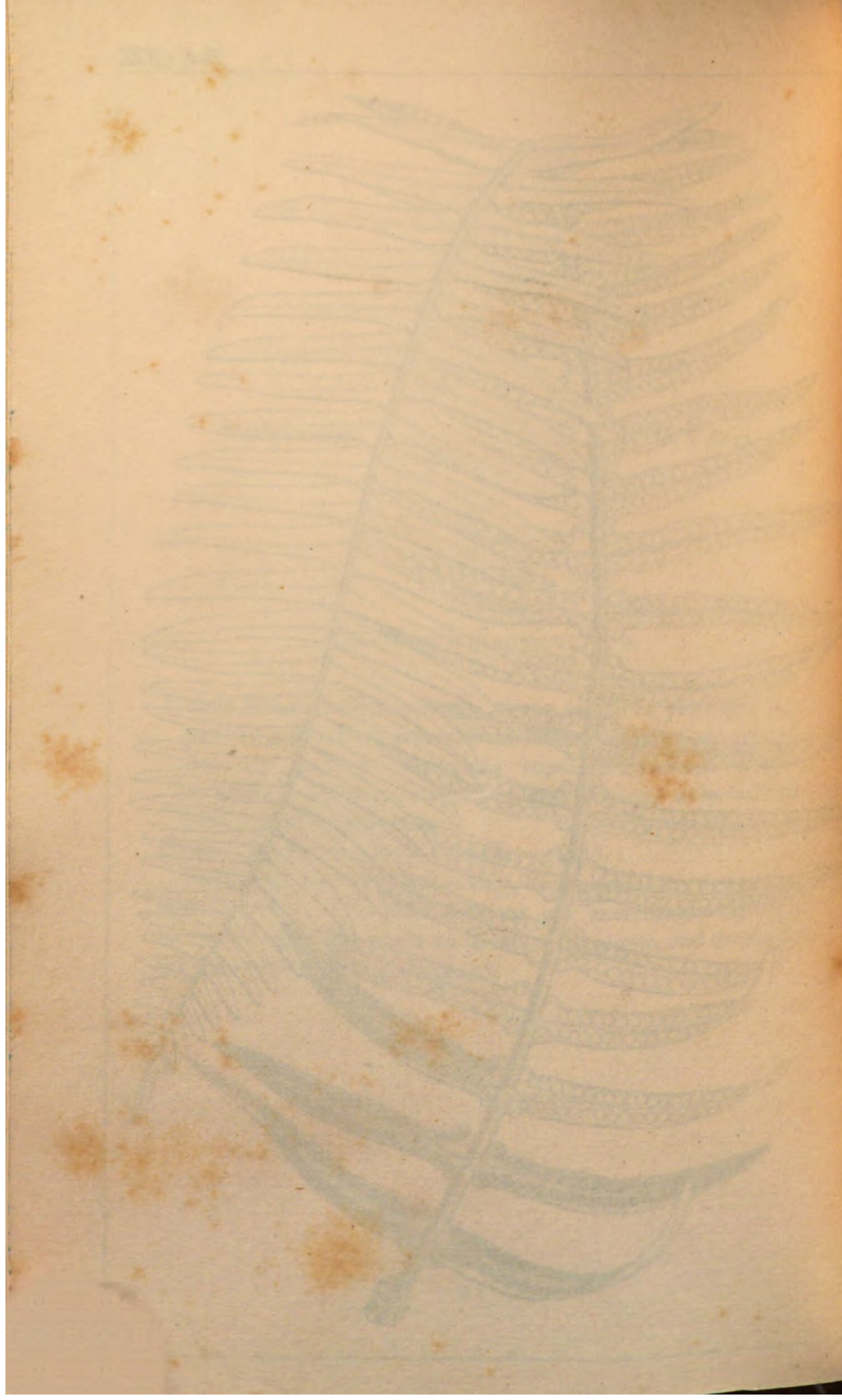
POLYPODIUM BIAURICULATUM.

Fronde lato-lanceolata pinnata, pinnis sessilibus plerisque oppositis approximatis patentissimis lineari-lanceolatis integerrimis basi utrinque auriculatis supra pilosiusculis subtus rachibusque dense pubescentibus, soris copiosis uniserialibus intra costam et marginem.

HAB. Chacapoyas, Peru. *Mathews*, 1836.

The stipes is about 6 inches long, terete, dark brown, opaque, slightly downy. The fructifications are exceedingly copious, occupying nearly the whole underside of the pinnæ, and throughout the whole length of the frond.





TAB. CXXII.

ANDROMEDA PHYLLYREIFOLIA.

Glaberrima, foliis sempervirentibus ellipticis oblongisve brevissime petiolatis coriaceis nitidis marginibus revolutis apice obscure serratis, racemis laxis axillaribus folio longioribus, calyce profunde 5-partito, corolla ovaliore 5-dentato, filamentis dilatatis bicruris, antheris ovatis bifidis dorso biaristatis.

HAB. Apalachicola, W. Florida. *Mr. Drummond*, (n. 27.)

This is decidedly a new and very beautiful species which cannot be confounded with any I have ever seen. It would seem from the long rather straight branches that it forms a *shrub* of considerable height, flowering in great perfection in the latter end of January and beginning of February. The *leaves* are truly elliptical or oblong-obtuse, glossy, when dry distinctly reticulated with copious veins, the margin revolute. *Racemes* numerous, handsome. *Bractea*, at the base of the pedicels, minute, subulate. *Calyx* cleft to the base into 5 upright, lanceolate segments, half as long as the corolla, which latter appears to be greenish-white, slightly tinged with red. *Filaments* broad, singularly curved or folded twice below the anther. *Germen* ovato-globose, with 5 blunt angles and ten small glands at the base.

Fig. 1. Flower. *f.* 2. Front view, and *f.* 3. back view of a stamen. *f.* 4. Calyx cut through to show the pistil and glandular disc :—*magnified*.



Wightianæ.

N. O. Capparideæ.

TAB. CXXIII.

CAPPARIS INCANESCENS.

Fruticosa, ramis diffusis valde flexuosis subdichotomis, stipulis spinosis curvatis, foliis elliptico-oblongis mucronulatis junioribus ramulisque canescentibus, corymbis multifloris umbellatis subsessilibus, pedicellis calycibusque glabris, ovario globoso acuto glabro. *W. et A.*

Capparis incanescens. *De Cand. Prodr. v. 1. p. 247. Wall. List, n. 6994. Wight, Cat. n. 106. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 26.*

C. stylosa, β. velutina. *De Cand. Prodr. v. 1. p. 246.*

HAB. Southern provinces of the Madras Peninsula. *Dr. Wight.*

Of this species, which indeed Messrs. Wight and Arnott scarcely think distinct from the *C. Roxburghii*, DC. (*C. corymbosa* Roxb. Hort. Bengh.) the flowers are small. The sepals are nearly equal, imbricated: the interior pair thin and membranaceous, the two exterior herbaceous. *Corolla* of 4 lanceolate petals, a little longer than the calyx. *Stamens* about 15. *Filaments* much curved, as long as the petals. *Anthers* ovate. *Ovary* supported on a stalk as long as the stamens. *Fruit* a small globose *Berry*, usually (by abortion) 1-seeded.

Fig. 1. Flower :—*magnified.*



Fig. 1. Fruit cut through transversely to show the solitary seed.

For the drawing of this and of many other Malian plants to be figured here, I am indebted to the kindness of Dr. Wright.

HAB. Malian Peninsula. Dr. Wright.

Conocarpus apertifolius. Spr. Spec. Kew. v. 2. p. 448.

C. limicola. Hord. Hort. Kew. p. 41.

C. apertifolius. Hord. Hort. Kew. p. 238.

Conocarpus Jacq. v. 1. p. 23.

n. 6075. Wright, Cat. n. 109. Wright & Ait. Prodr. II.

Conocarpus linearis. De Cand. Prodr. v. 1. p. 241. Willd. Enum.

overo fructibus ovatis, semine solitario. W. & A.

fructibus ovatis, semine solitario, calyce campanulato.

fructibus ovatis, semine solitario, calyce campanulato.

fructibus ovatis, semine solitario, calyce campanulato.

LEUCOPHYLLA LINEARIS

TAB. CXXIV

W. O. Wright

Wightianæ.

N. O. Capparideæ

TAB. CXXIV.

NIEBUHRIA LINEARIS.

Apetala, foliis trifoliolatis, foliolis ovatis oblongis linearibusve mucrone recurvato terminatis minute punctato-rugosis petiolo brevioribus, racemis terminalibus, tubo calycino campanulato, ovario fructuque ovoideis, semine solitario. *W. et A.*

Capparis linearis. *De Cand. Prodr. v. 1. p. 244. Wall. List, n. 6975. Wight, Cat. n. 100. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 23.*

C. apetala. *Roth, Nov. Sp. p. 238.*

C. linifolia. *Roxb. Hort. Beng. p. 41.*

Cratæva apetala. *Spr. Syst. Veget. v. 2. p. 448.*

HAB. Madras Peninsula. *Dr. Wight.*

For the drawing of this, and of many other Madras plants to be figured here, I am indebted to the kindness of Dr. Wight.

Fig. 1. Fruit cut through transversely to show the solitary seed.



Wightianæ

N. O. Byttneriaceæ.

TAB. CXXV.

PTEROSPERMUM RETICULATUM.

Foliis cuneato-oblongis 4-nerviis obliquis basi subcordatis acuminatis integerrimis vel apicem versus grosse dentatis, subtus albo-farinosi venis prominentibus reticulatis, pedunculis subtrifloris versus apices ramorum congestis petiolis longioribus, foliis involucralibus palmatifidis a flore paululum remotis caducis, petalis obovato-oblongis patentibus, filamentis sterilibus filiformibus, ovarii loculis subsexovulatis. *W. et A.*

Pterospermum reticulatum. *Wight, Cat. n. 241. Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 69.*

HAB. Madras Peninsula. *Dr. Wight.*

Messrs Wight and Arnott observe of this plant that the flowers are much larger than those of *Pter. suberifolium*, Lam. and much smaller than those of *P. Heyneanum*, Wall.: two allied species.



Wightianæ.

N. O. Capparideæ.

TAB. CXXVI.

CAPPARIS BREVISPINA.

Stipulis spinosis brevibus rectiusculis, foliis brevi-petiolatis lato-lanceolatis ovalibusve magis minusve acutis mucronatis coriaceis glabris reticulatis subtus pallidioribus, pedicellis gracilibus axillaribus solitariis 1-floris folio subbrevioribus, ovario oblongo dense pubescente, bacca subglobosa lævi. *W. et A.*

Capparis brevispina. *Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 24.*

C. acuminata. *Roxb. Fl. Ind. v. 2. p. 566 (not Willd.)*

α. Foliis ovatis seu oblongo-lanceolatis. *Wight, Cat. n. 99.* C. brevispina, *De Cand. Prodr. v. 1. p. 248.*

β. Foliis ovalibus oblongis acutis. *Wight, Cat. n. 97.* C. Rheedii. *De Cand. Prodr. v. 1. p. 246. (excl. Syn. Rheedii).* C. Wightiana. *Wall. List. n. 6987.*

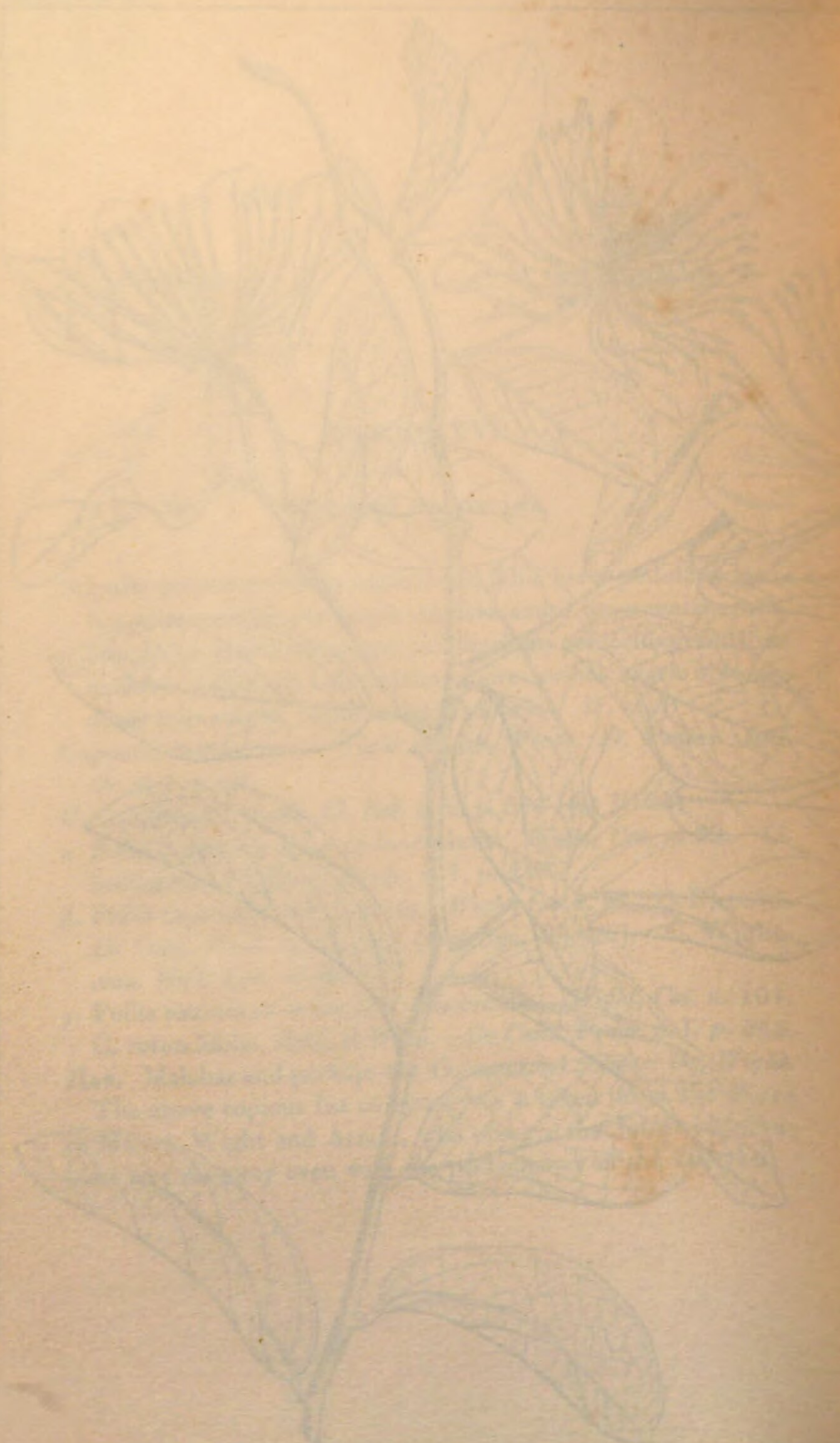
γ. Foliis rotundato-ovatis basi subcordatis. *Wight, Cat. n. 101.*

C. rotundifolia. *Rottl. et Willd.—De Cand. Prodr. v. 1. p. 245.*

HAB. Malabar and perhaps the Coromandel coasts. *Dr. Wight.*

The above copious list of synonyms is taken from the Flora of Messrs. Wight and Arnott, who observe that future observations may do away even with the permanency of the varieties.





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Wightianæ.

N. O. Capparideæ.

TAB. CXXVII.

NIEBUHRIA OBLONGIFOLIA.

Foliis simplicibus ovali-oblongis mucronatis, calycis tubo anguste obconico, petalis æqualibus lanceolatis undulatis acutis calyce subduplo brevioribus, ovario cylindrico, fructibus nodosis inter semina constrictis. *W. et A.*

α. Foliis apice emarginatis. *Wight, Cat. n. 86, α. Wall. List, n. 6976, e. N. arenaria. De Cand. Prodr. v. 1. p. 244.*

β. Foliis retusis obtusisve. *Wight, Cat. n. 86. N. oblongifolia. De Cand. Prodr. v. 1. p. 244. Wall. List, n. 6976. c. e. C. heteroclita. Roxb. Fl. Ind. v. 2. p. 570. Crataeva oblongifolia. Spreng.*

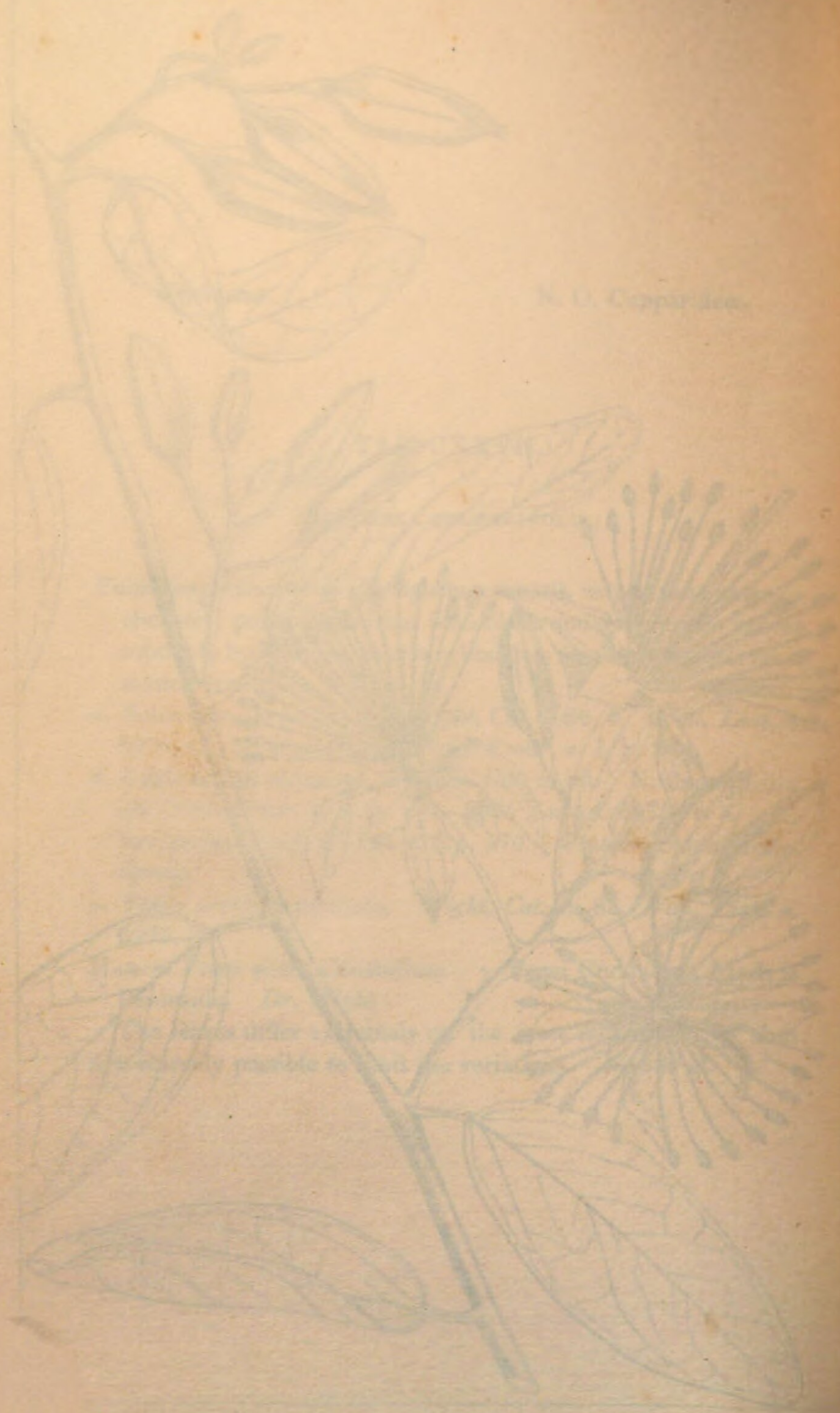
γ. Foliis ovatis acuminatis. *Wight, Cat. n. 85. Wall. List, n. 6976. α.*

HAB. *α.* From about Courtallum. *γ.* From Cuddalore, Madras Peninsula. *Dr. Wight.*

The leaves differ extremely on the same individual; so that it is scarcely possible to limit the variations. *W. and A.*



N. O. Copper Ice.



M. O. Capparis

Hydnoraceae

TAB. CXXVIII.

CAPPARIS PEDUNCULATA.

Stipulae spinosae, foliis subrotundo-ovatis obtusis, ternatis, brevissime petiolatis glabris, umbellae sessilibus (2-3) umbellulis saepe in ramis brevibus axillaribus paucis (2-3) floribus pedicellis calycibusque glabris, ovario globozo, fructu globozo polyspermo. H. et A.
Capparis pedunculata. Wall. Cat. n. 6222. Fl. Ind. Coch. n. 20.
Habitat et Asia. H. Penn. Ind. Or. n. 1. p. 21.
HAB. Near Point Calamete in Tadjore. Dr. Wight.

Fig. 1. Fruit cut through transversely;—magnified.

Wightianæ.

N. O. Capparideæ.

TAB. CXXVIII.

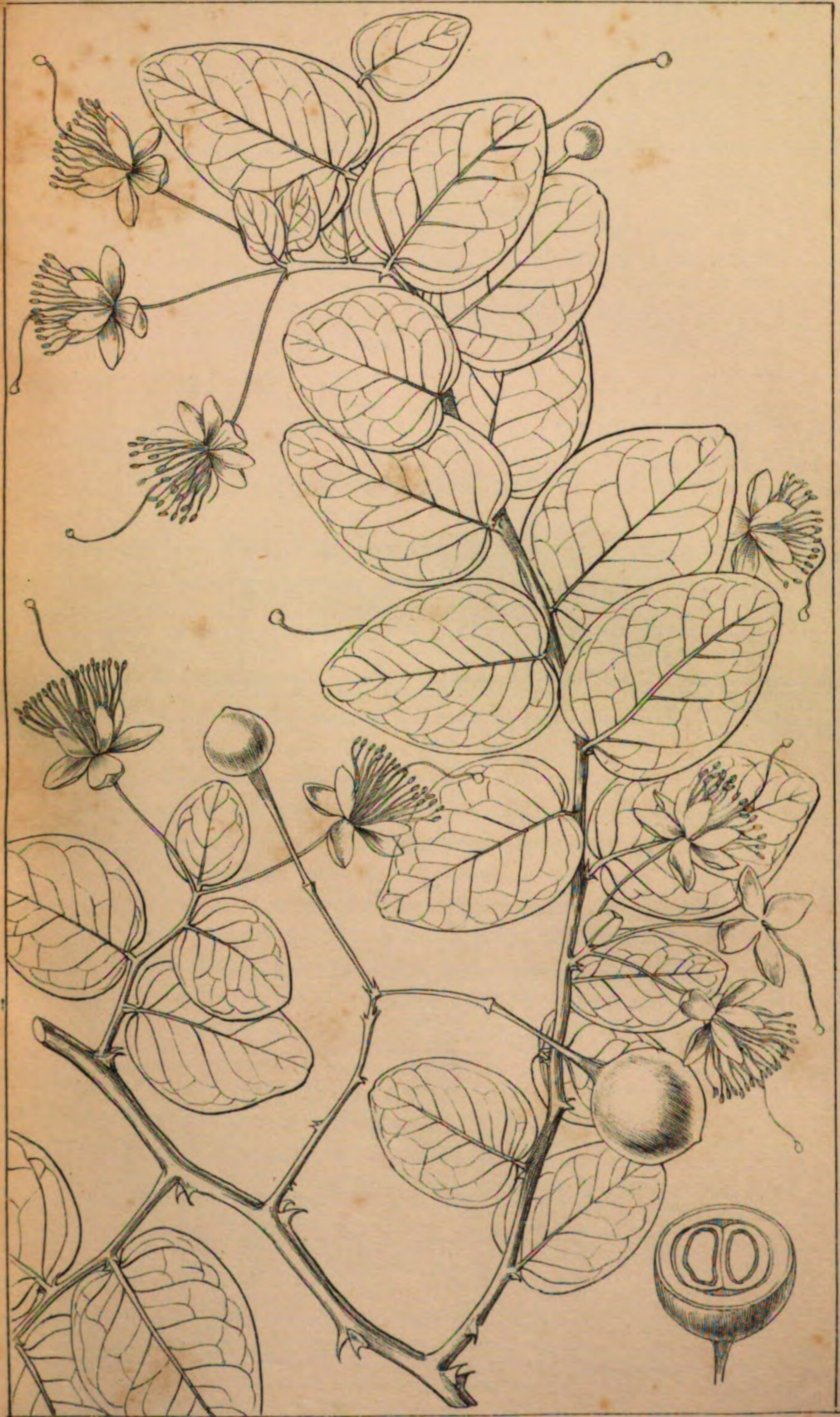
CAPPARIS PEDUNCULOSA.

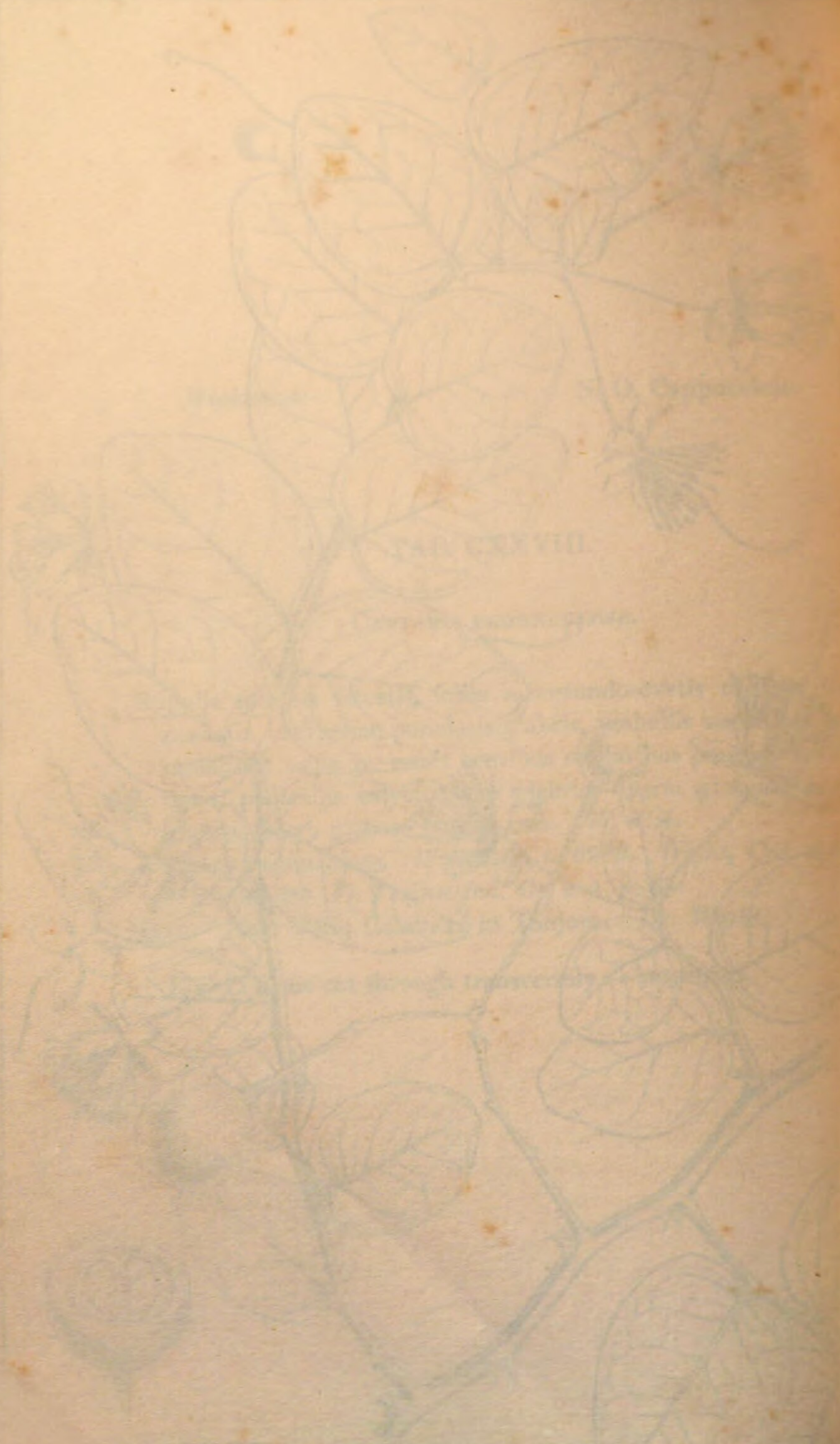
Stipulis spinosis falcatis, foliis subrotundo-ovatis obtusis basiscordatis, brevissime petiolatis glabris, umbellis sessilibus terminalibus sæpe in ramis brevibus axillaribus pauci-(-2—3)-floris, pedicellis calycibusque glabris, ovario globoso acuto glabro, fructu globoso polyspermo. *W. et A.*

Capparis pedunculosa. *Wall. List, n. 6999. Wight, Cat. n. 89. Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 27.*

HAB. Near Point Calamere in Tanjore. *Dr. Wight.*

Fig. 1. Fruit cut through transversely:—*magnified.*





TAR CXXVII

Coronilla varia L.

1857. May 1. Found in the woods near the
house. The plant was in flower and the
flowers were of a pale pink color. The
leaves were large and rounded. The
plant was very healthy and the
flowers were in full bloom. The
plant was found in a very fertile
soil and was very common.

Found in the woods near the house.

Mathewsianæ.

N. O. *Meliaceæ.*

TAB. CXXIX.

GUAREA? MICROPHYLLA.

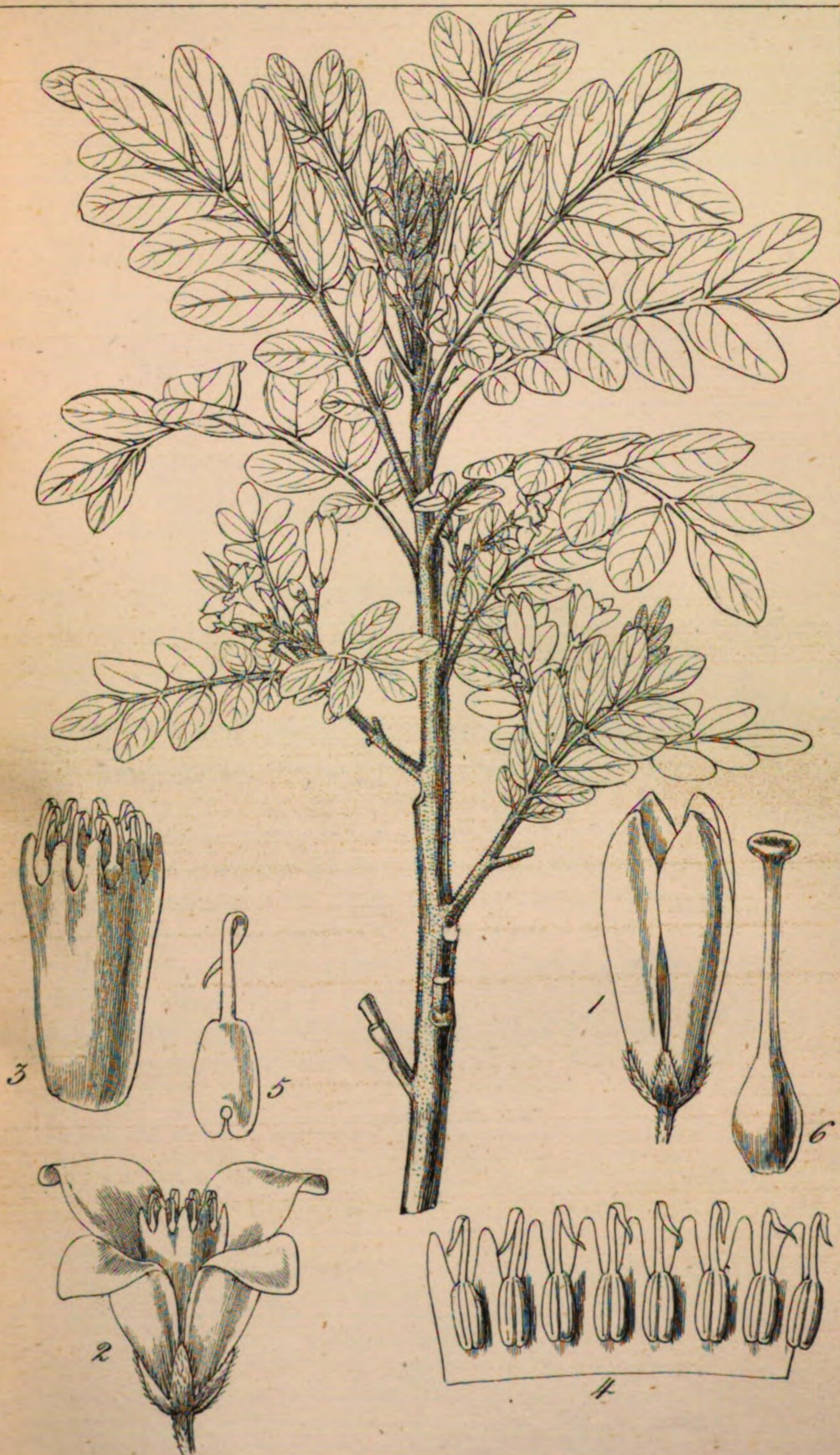
Foliolis 4—5 jugis ellipticis integerrimis subtus præcipue ramulisque pubescentibus, racemis axillaribus paucifloris, calyce hirsuto 4-partito, staminum tubo 8-dentato, antheris longe aristatis, toro obsoleto.

HAB. Prov. of Chacapoyas, Peru. *Mathews* (n. 2128) 1836.

Without fruit I cannot possibly refer this to any of Adrien de Jussieu's Genera of *Meliaceæ*, an order, I believe, extremely limited, as to number, in Western South America, but to which, rather than to *Cedreleæ*, I think it certainly belongs. I have therefore only referred it provisionally to the Genus *Guarea*. The anthers are sessile on the staminal tube and interior, alternating with the blunt teeth and terminated by a long flaccid awn, which appears to be incurved for its upper half.

Although my own specimen bears the number 2128, I have reason to believe, that no number was attached to the specimens sent to other subscribers. It came in the collection of 1836.

Fig. 1. Flower, unexpanded. *f.* 2. Open flower. *f.* 3. Staminal tube. *f.* 4. Upper part of the staminal tube laid open, bringing the aristate anthers more distinctly into view. *f.* 5. Back view of an anther:—*magnified.*





N. A. P. 1890

1890

TAB. LXX.

Riviera, 1890.

Illustration of the ovary, showing the position of the ovules.

Fig. 1. Transverse section of the ovary.

A transverse section of the ovary, showing the position of the ovules. The ovules are arranged in a spiral pattern, and the ovary is surrounded by a thick wall. The ovules are shown in various stages of development, from small and round to larger and more elongated. The ovary is shown in a longitudinal section, and the ovules are arranged in a spiral pattern. The ovary is surrounded by a thick wall, and the ovules are shown in various stages of development, from small and round to larger and more elongated.

Fig. 2. Longitudinal section of the ovary. A. 2. Fig. 3. Longitudinal section of the ovary. A. 3. Fig. 4. Longitudinal section of the ovary. A. 4. Fig. 5. Longitudinal section of the ovary. A. 5.

Mathewsianæ.

N. O. Phytolacceæ.

TAB. CXXX.

RIVINA INÆQUALIS.

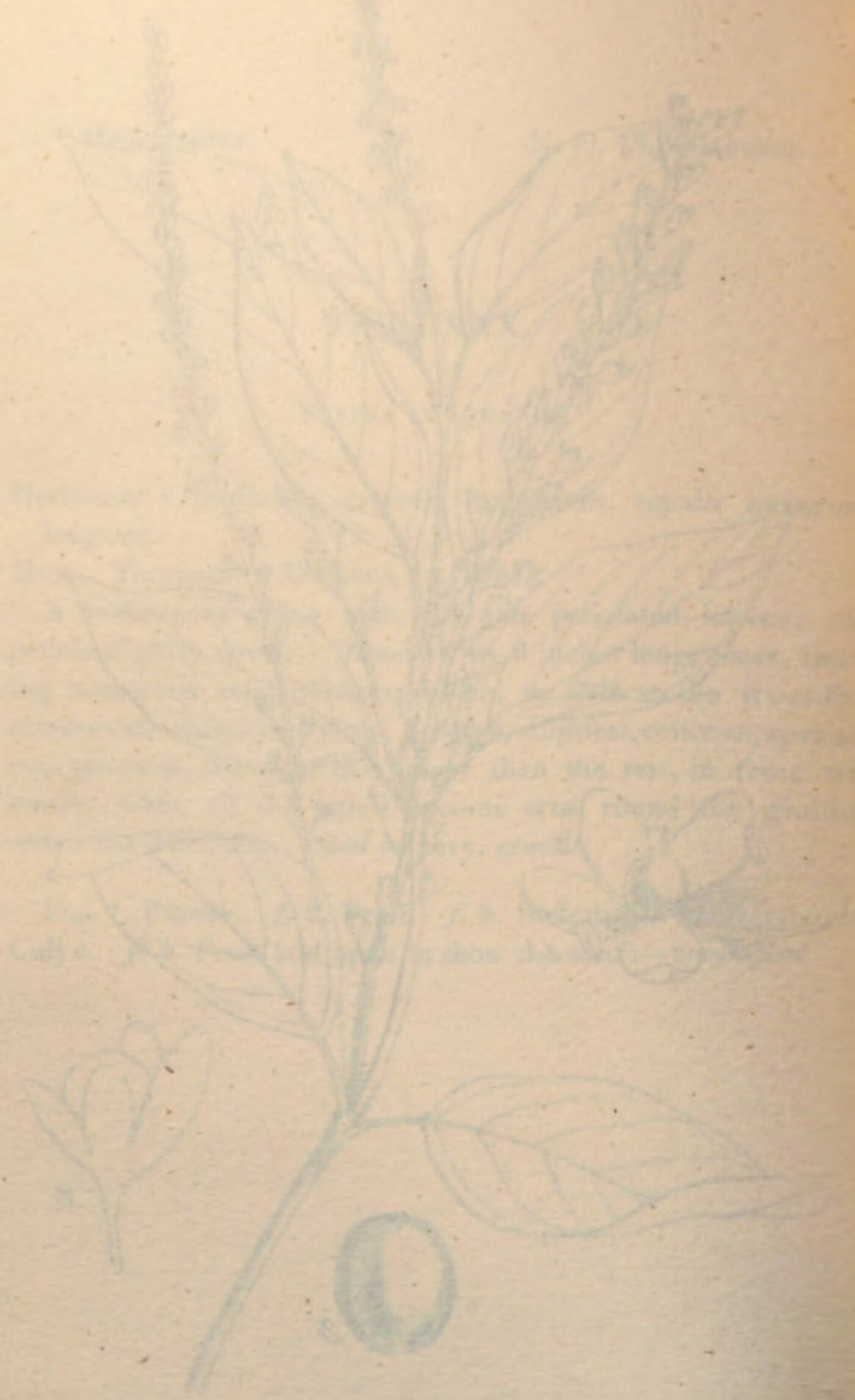
Herbacea, foliis ovatis, racemis longissimis, sepalo exteriori longiore.

HAB. Tarapoto. *Mathews*, (n. 1604).

A herbaceous *plant*, with alternate petiolated leaves; the petiole slightly downy. *Racemes* 4—6 inches long, erect, bearing numerous small *flowers*, which, as well as the fructified racemes, turn black in drying. *Sepals* 5, elliptical, concave, spreading, glabrous, the outer one longer than the rest, in fruit still longer, when all the sepals become erect round the globose somewhat dry berry. *Seed* solitary, erect.

Fig. 1. Flower. *f.* 2. Fruit. *f.* 3. Included in the persistent Calyx. *f.* 4. Fruit laid open to show the seed :—*magnified*.





TAB. CXXI

Vaccinium Linnaeus

Fls. sessile, crowded into cymes and cymes sessile, with
 glabrous, axillary, terminal, or axillary, pedicels
 distinct (rarely on leafy pedicels) bracts coriaceous
 corolla subovate 5-partite, lobes oblong, apices long
 tubular, exserted, filaments distinct, inner margin
 deeply undulate.

Fls. Wooded mountains in the province of Michigan
 (Petersen & Co.).

Apparently a low, much branching shrub, with elliptical
 almost coriaceous, leaves, and copious terminal and axillary
 racemes. The ovary is entirely inferior, with a 5-lobed short
 tube to the calyx. The corolla with a very short tube and a
 deeply spreading segments. Stamens much exserted, anthers
 2-3 swollen below the middle, arising from a depressed disc
 on the top of the ovary.

Fig. 1. 2. Flower. 3. Petal and calyx. A. & S. Sumner.

Bojerianæ.

N. O. Vaccinieæ.

TAB. CXXXI.

VACCINIUM EMIRNENSE.

Foliis sempervirentibus lato-ellipticis subcoriaceis serratis venosis glaberrimis, racemis terminalibus axillaribusque, pedicellis bibracteatis (tertia ad basin pedicelli) bracteis cordatis serratis, corolla subrotata 5-partita, laciniis oblongis, antheris longe tubulosis exsertis muticis, filamentis dilatatis intus marginibusque puberulis.

HAB. Wooded mountains in the province of Madagascar.
Professor Bojer.

Apparently a low, much branching shrub, with elliptical, almost coriaceous, leaves, and copious terminal and axillary racemes. The *ovary* is entirely inferior, with a 5-lobed short limb to the calyx. The *corolla* with a very short tube and 5 oblong spreading segments. *Stamens* much exserted, awnless. *Style* swollen below the middle, arising from a depressed disc on the top of the ovary.

Fig. 1. 2. Flowers. *f.* 3. Pistil and calyx. *f.* 4. 5. Stamens:—*magnified.*



TAB. CXXXII.

AMIROLA NITIDA.

Foliis ovatis serratis simplicibus ternatisque eglandulosis, utrinque glabris, costa superne petiolisque dilatatis puberulis.

Amirola nitida. *Pers. Syn. Pl. v. 2. p. 565. De Cand. Prodr. v. 1. p. 616.*

Llagunoa nitida. *Ruiz et Pavon, Fl. Peruv. Prodr. p. 252. Gen. Fl. Per. et Chil. p. 126. t. 28.*

β. Foliis omnibus simplicibus. (Tab. Nostr. CXXXII.)

HAB. Peru; and woods of Muna, and rocky places in the provinces of Canta and Caxatambo. *Ruiz et Pavon. Province of Chacapoyas. Mathews, 1836.*

Ruiz and Pavon describe their original plant as having leaves both simple and ternate; ours, which from the locality and other circumstances I am disposed to consider the same, has only simple leaves. Humboldt and Kunth, having detected in New Grenada two other supposed species having all simple leaves, doubted the correctness of Ruiz and Pavon in ascribing ternate leaves; but since another, a Chilian species, has decidedly ternate leaves, there is every reason to put confidence in the statements of the Spanish botanists: and I have hence made Mr. Mathews' plant here figured a *var.* I am even disposed to look upon Humboldt and Kunth's 2 species as not really distinct from ours; they were found at Loxa, at no very remote distance from the provinces above-mentioned, and the difference depending upon scarcely any other character than the greater or less degree of pubescence of the leaves. Indeed those learned authors themselves say of their *A. pinnifolia*, "an *A. nitida* diversa?" and of their following species *A. mollis*, "præcedenti simillima."

The species derives the name of *nitida* from the circumstance of the natives making rosaries of the black glossy seeds. The dilatation of the petiole is scarcely seen in the dry state, when the sides turn up, presenting a grooved front.

Fig. 1. Back of a flower. *f.* 2. Front view of a male flower. *f.* 3. do. of a female flower. *f.* 3. Pistil. *f.* 4. Capsule: *nat. size.* *f.* 5. Capsule burst open showing the 3 seeds:—all but *f.* 4. *magnified.*



W. O. Smith

W. O. Smith

TAB. CXXIII

FIGURES 1-10

1. This specimen is a small, thin, translucent, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface. It is a single, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface. It is a single, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface.

2. This specimen is a small, thin, translucent, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface. It is a single, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface. It is a single, elongated, slightly curved, and somewhat flattened, with a slightly irregular surface.

Walkerianæ.

N. O. Aroideæ.

TAB. CXXXIII.

POTHOS REMOTIFLORUS.

Caule scandente gracili flexuoso ramoso, foliis lato-lanceolatis acuminatissimis trinerviis, petioli vagina elongata canaliculata, spadice gracili elongato flexuoso pedunculato, spatha lineari-oblonga acuta spadice brevior, floribus remotis, perianthio 6-lobo hexandro.

HAB. Ceylon. *Mrs. Col. Walker.*

The learned Austrian Botanists Schott and Endlicher in their revision of the *Balanophoreæ* (Meletemata Botanica) attribute 4 stamens only to Pothos. Here there are 6, opposite to the segments of the perianth, if it may be so called, which seems made up of the rachis itself, forming a 6-lobed cup in which the stamens and pistil are situated. The *Pothos tenera*, Wall. Cat. n. 4439, from Penang, is nearly allied to this, but it has a straighter stem and spadix with closely placed flowers, more rigid leaves and a very different petiole.



Bojerianæ.

N. O. Vaccinieæ.

TAB. CXXXIV.

VACCINIUM SECUNDIFLORUM.

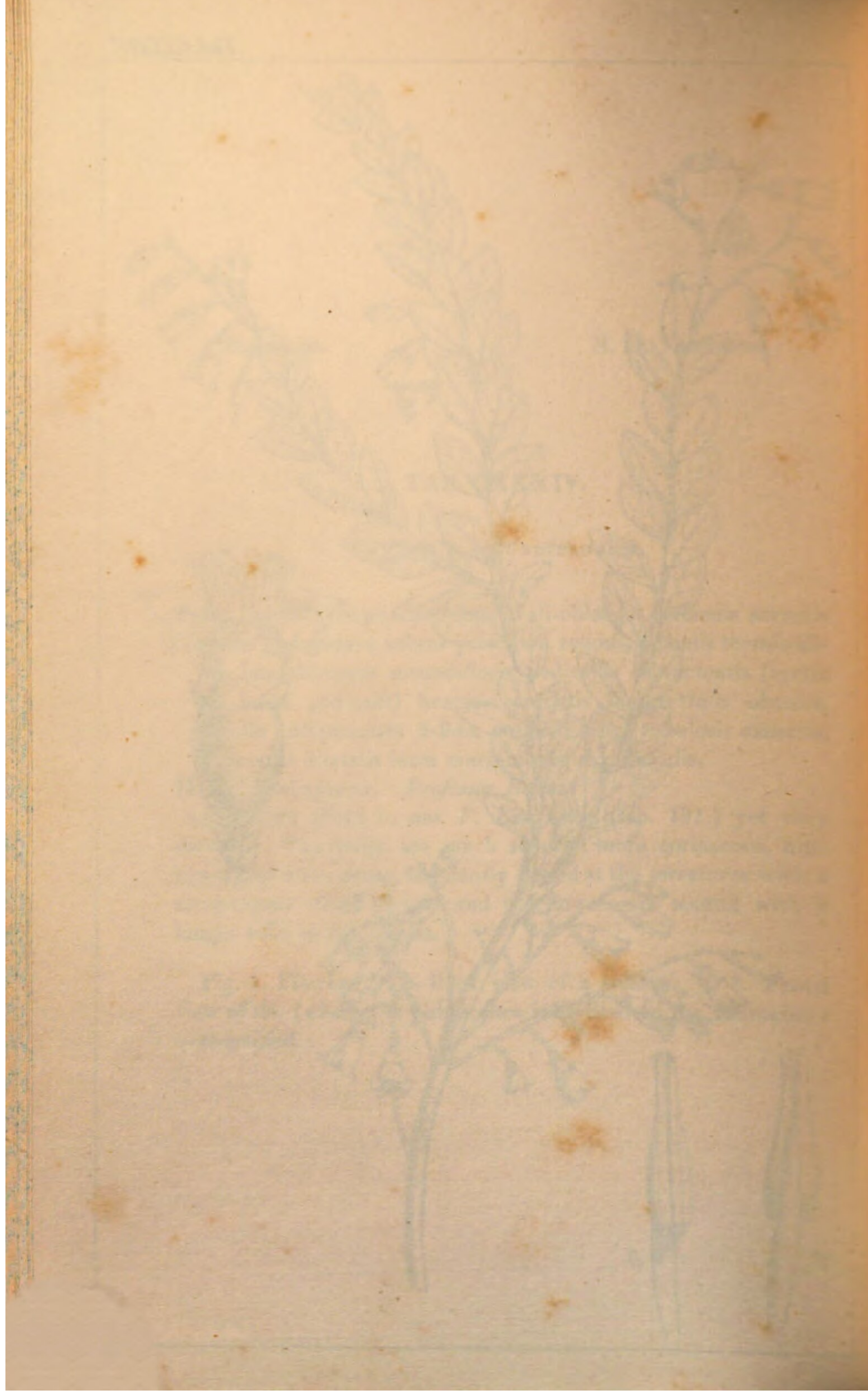
Foliis (parvis) sempervirentibus ovali-oblongis coriaceis serratis acutis glaberrimis subtus præcipue venosis, racemis terminalibus lateralibusque secundifloris pedicellis bibracteatis (tertia ad basin pedicelli) bracteis cordatis integerrimis obtusis, corolla campanulata 5-fida, antheris longe tubulosis exsertis, filamentis dilatatis intus marginibusque puberulis.

HAB. Madagascar. *Professor Bojer.*

A species allied to our *V. Emirnense* (tab. 131.) yet very distinct. The leaves are much smaller, more coriaceous, narrower and more acute, frequently tipped at the serratures with a conspicuous white gland: and the flowers are secund with a longer tube to the corolla.

Fig. 1. Flower. *f.* 2. Back view of a stamen. *f.* 3. Front view of do. (where the pubescence is omitted on the filament): —*magnified.*





TAB. CXXXV.

GYMNOSTOMUM SETIFOLIUM. *Hook. et Arn.*

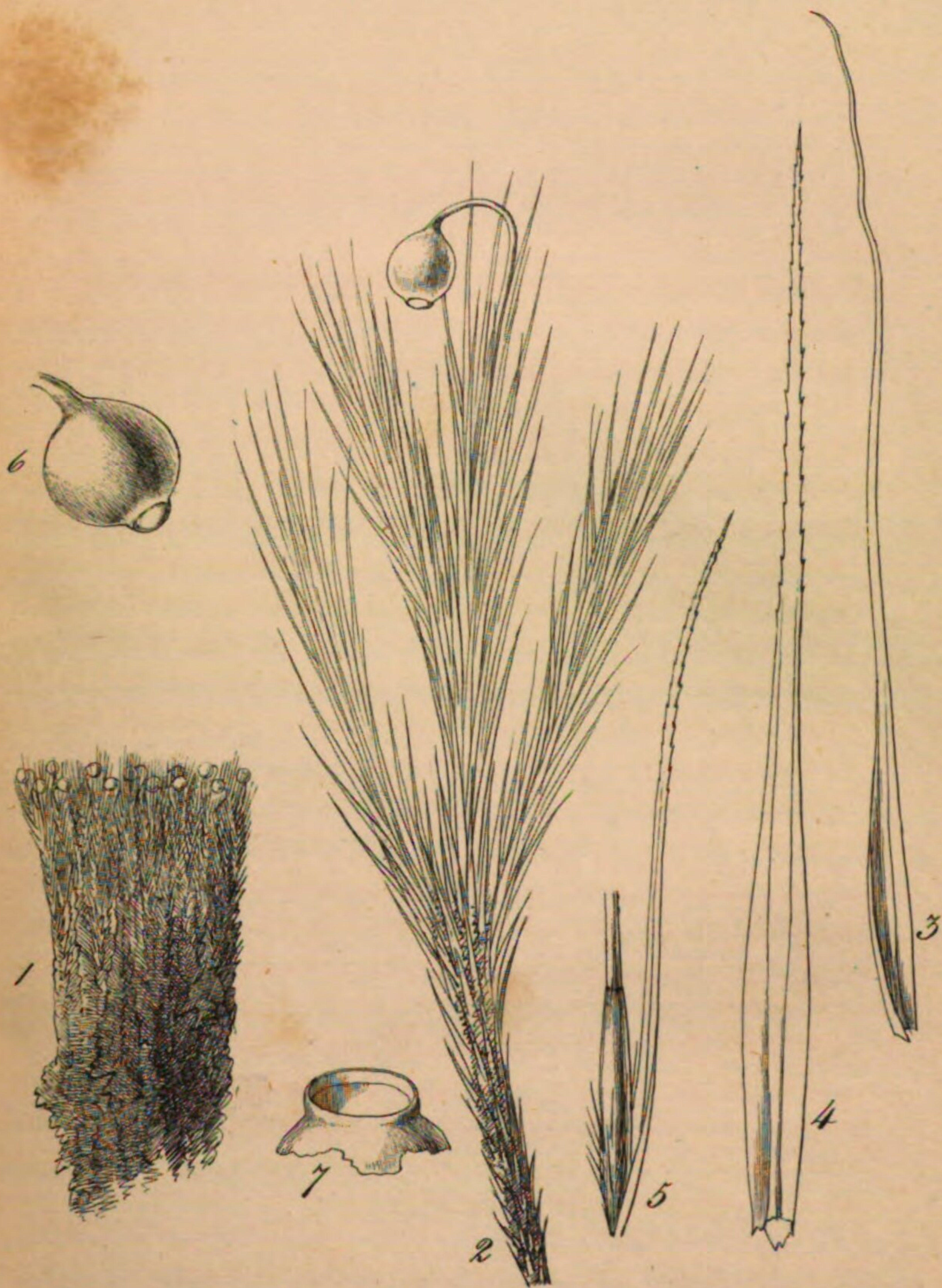
Densissime cæspitosum elongatum ramosum, foliis subulato-setaceis serrulatis, nervo crasso excurrente, seta ob innovationes sæpe laterali superne inflexo-curvato, capsula globosa lævi, operculo minuto conico depresso.

HAB. Huamantantga, Peru. *Mathews*, n. 586.

Planta densissime cæspitosa, radiculosa, superne ramosa, viridis. *Folia* erecta, numerosa, imbricata, stricta, subulato-setacea, suprema longissima, denticulata, nervo crasso longe excurrente: *perichætialia* reliquis similia. *Seta* terminalis, vel ob innovationes lateralis, foliis subimmersa, apicem versus insigniter inflexa, lævis. *Capsula* globosa, ore subcontracto paululum elevato. *Operculum* parvum, breviter conicum. *Peristomium* nullum.

This plant has the habit of *Conostomum* and of *Bartramia ithyphylla*. and *B. stricta*: but if generic characters are to be rigidly derived from the peristome these four must belong to as many different genera. *Bartramia ithyphylla* has a double peristome, each of a remarkable structure: *B. stricta*, as far as our investigations have gone, possesses a single one, and that interior: *Conostomum* has only the exterior, and the present *Gymnostomum*, as we at present consider it, (together with a few others belonging to Brown's Genus *Glyphocarpa*,) is destitute of both. The same peculiarities we have elsewhere noticed in certain mosses with the habit of *Bryum cæspititium*.

Fig. 1. Tuft, *nat. size.* *f.* 2. Portion of a plant. *f.* 3. 4. Leaves. *f.* 5. Perichætium and leaf. *f.* 6. Capsule with its operculum. *f.* 7. Mouth of the Capsule:—*magnified.*



TAB. CXXV

Plum, California, 1885

The following description of the plum is given by the author. The plum is a small, round, yellowish fruit, with a greenish-yellow skin, and a greenish-yellow flesh. It is a very common fruit in California, and is often found in the markets. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine.

This plum is much like the plum of the plum, with the capsule resembling the plum. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine.

Fig. 1. Plum, California, 1885. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine. The plum is a very good fruit, and is often used for eating. It is also used for making plum sauce, and for making plum wine.

TAB. CXXXVI.

WEISSIA CAMPYLOCARPA. *Arn. et Hook.*

Caule brevissimo innovationibus elongato inferne nudiusculo, foliis imbricatis ovato-lanceolatis acuminatis laxè reticulatis subserratis, nervo distincto ad apicem attingente, seta elongata apice inflexa, capsula cernua sursum curvata cylindræa, operculo conico.

HAB. Surrucucho, Peru. *Prof. W. Jameson.*

Caules fructiferi perbreves superne foliosi: innovationes copiosæ, elongatæ. *Folia* arcte imbricata, erecta, ovato-lanceolata, laxè reticulata, obscure serrata, acuminata, nervo attingente percursa. *Seta* uncialis et ultra, erecta, superne valde inflexa. *Capsula* majuscula, cylindræa, cernua atque sursum curvata, pallide rufo-fusca, lævis. *Operculum* parvum, conicum. *Peristomium* e ciliis 16, æquidistantibus, remotis, gracillimis, albidis, obscure articulatis, basi membrana interna, ut videtur, connexis.

This moss has much the habit of a *Bryum*, with the capsule resembling some *Leptostoma*, yet having 16, entire, equidistant ciliæ. Thus we are led to refer it to *Weissia*, as that Genus now stands, from which it will no doubt be eventually separated, when we come to be better acquainted with the laws which ought to affect the arrangement of the genera of mosses. The sack within the capsule, together with its stalk and apophysis are distinctly seen, in the scarcely ripe state, through the somewhat pellucid outercoat.

Fig. 1. Tuft: *nat. size.* *f.* 2. Plant magnified. *f.* 3. Perichaetial leaf. *f.* 4. Cauline do. *f.* 5. Capsule. *f.* 6. Portion of the peristome.



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Handwritten text, likely a name or title.

TAB. CXXXVI

Wetland plants, etc. etc.

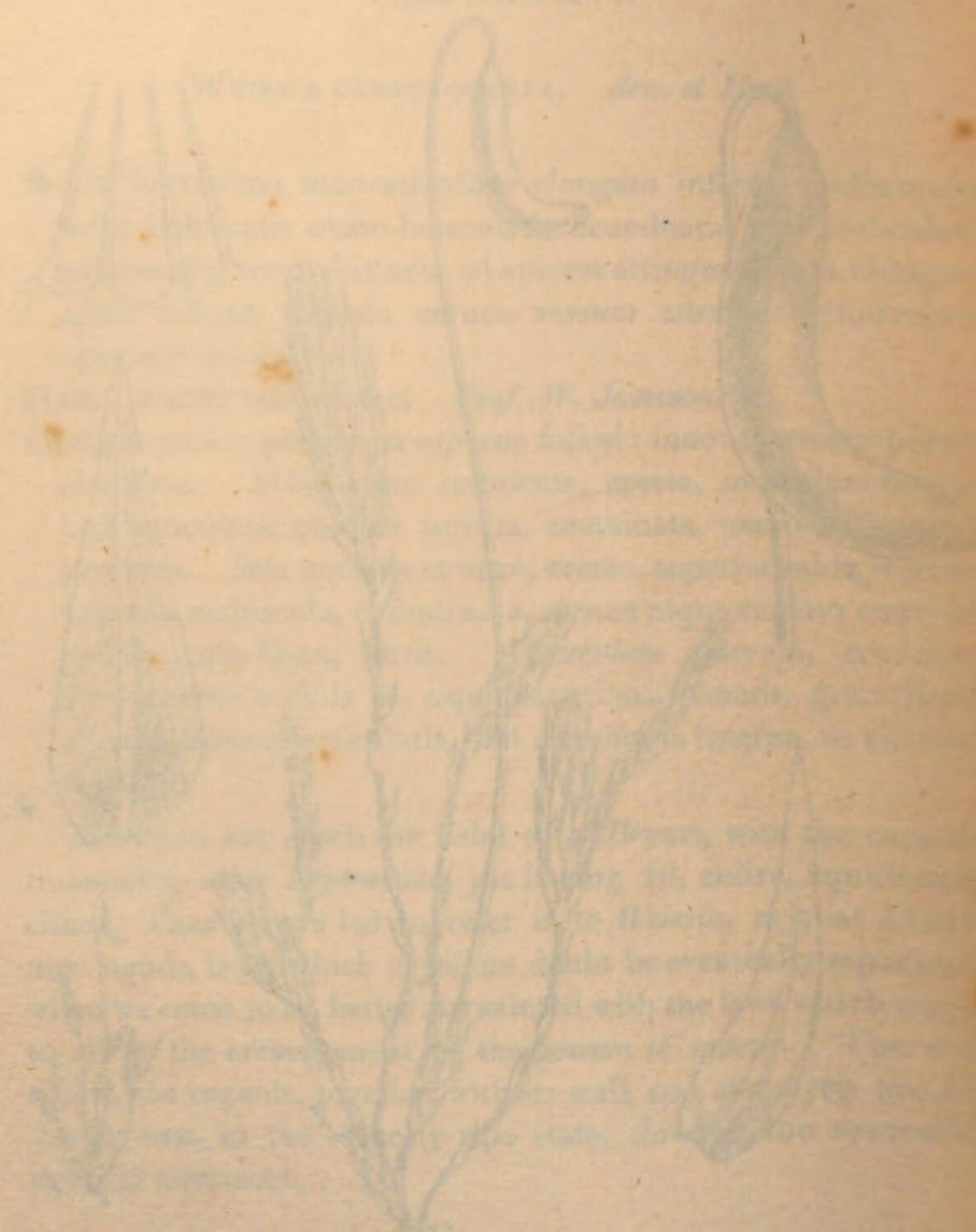


Fig. 1. Plant on soil. 2. Plant on water. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

N. O. Hannenbauer

W. O. Hannenbauer

TAB. CXXVII.

Hamamelis virginica

Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).
Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).
Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).

I think there can be no doubt of this being a genuine Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).
I have seen many specimens of the present species and not a single one which is not a Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).
The structure of the leaves, which they possess, is not at all different from the species just mentioned as well as from Hamamelis virginica, Linn. Sp. Pl. 1204. (1753).
The centre of our little plant from which the flowers are taken is clothed with very long beautifully silky hairs.

Mathewsianæ.

N. O. Ranunculaceæ,

TAB. CXXXVII.

HAMADRYAS ANDICOLA.

Sericea, acaulis foliis rhombeo-ovatis integris integerrimis junioribus petalis calycibusque subtus basique petioli sericeo-villosissimis.

HAB. Lofty and very cold situations upon the Cordillera of Andimarca, Peru. *Mathews*, (n. 1139).

I think there can be no doubt of this being a genuine *Hamadryas*, judging from the figure of *H. Magellanica* in De Lessert's Icones, and from a specimen in our Herbarium collected by Mr. Darwin: but my specimens of the present species are not sufficiently copious to allow of my examining so minutely as I could wish, the structure of the flowers, nor do they possess any fruit, which is still a desideratum among Botanists. It differs essentially from the species just mentioned as well as from *H. tomentosa*, not only in the entire leaves, but also in the absence of a stem. The centre of our little plant from which the flower rises, is clothed with very long beautifully silky hairs.





The plant is a member of the family ...
 It is a common plant in the ...
 The leaves are ...
 The flower is ...

TAB. CXXXVIII.

COCCINIA INDICA.

Coccinia Indica. *Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 347.*
α. Foliis integris 5-angulatis, breviterve 5-lobis. *Wight, Cat.*
n. 1123.

Bryonia grandis. *Linn. Mant. p. 126. De Cand. Prodr. v. 3.*
p. 305. Spr. Syst. Veget. v. 3. p. 15. Wall. Cat. n. 6700.

Bryonia. *n. 356. Linn. Fl. Zeyl. p.*

Momordica monadelpha. *Roxb. Fl. Ind. v. 3. p. 708.*

Cucurbita dioica. *Roxb. Ic. E. C. Mus. t. 213.*

Rheed. Mal. v. 8. f. 14. Burm. Zeyl. t. 19. f. 1. 2. Rumph.
Amb. v. 5. t. 166. f. 1.

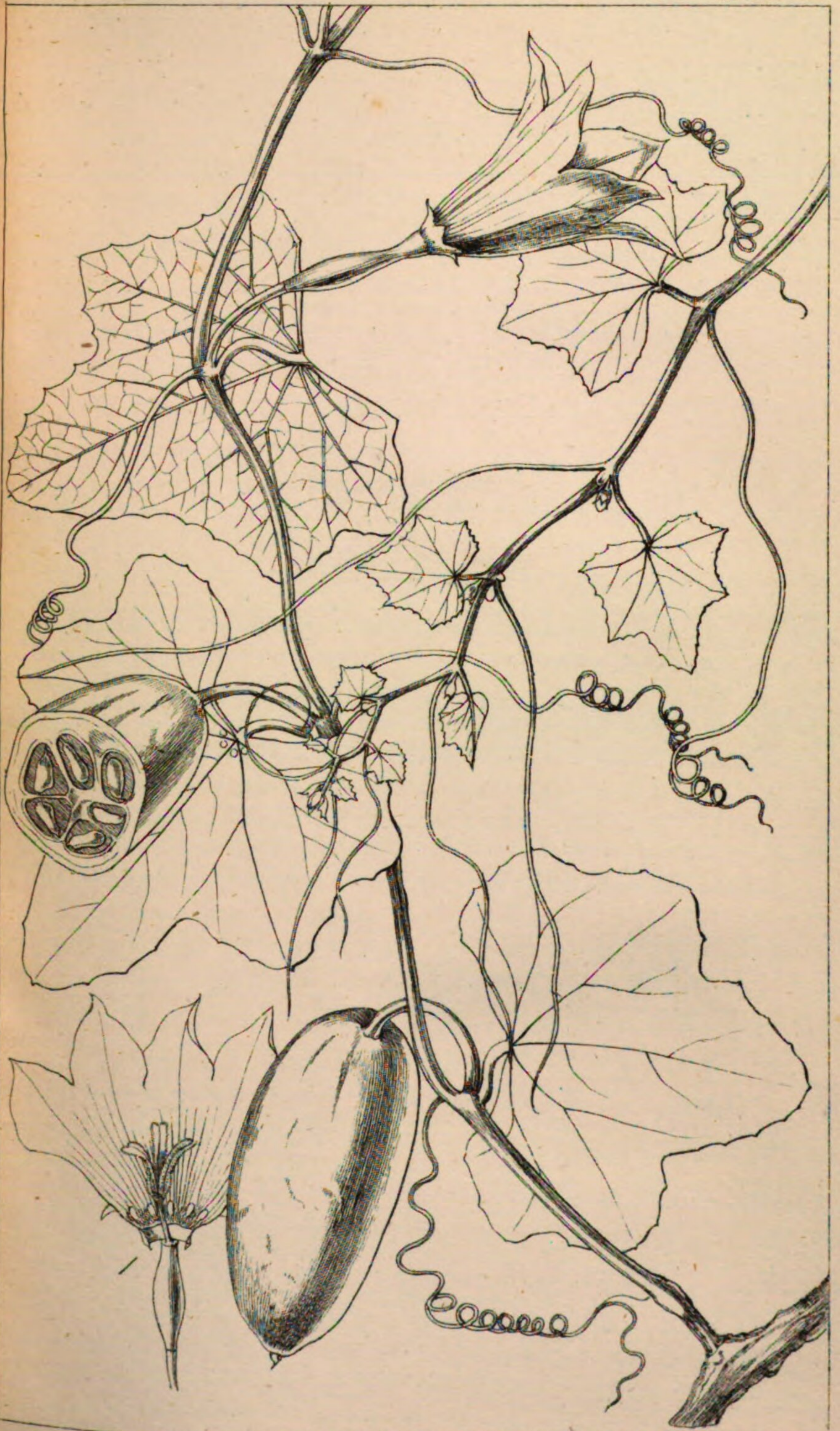
β. Foliis profunde 5-fido-palmatis, segmentis oblongis sinuato-
lobatis. *Wight, Cat. n. 1124.*

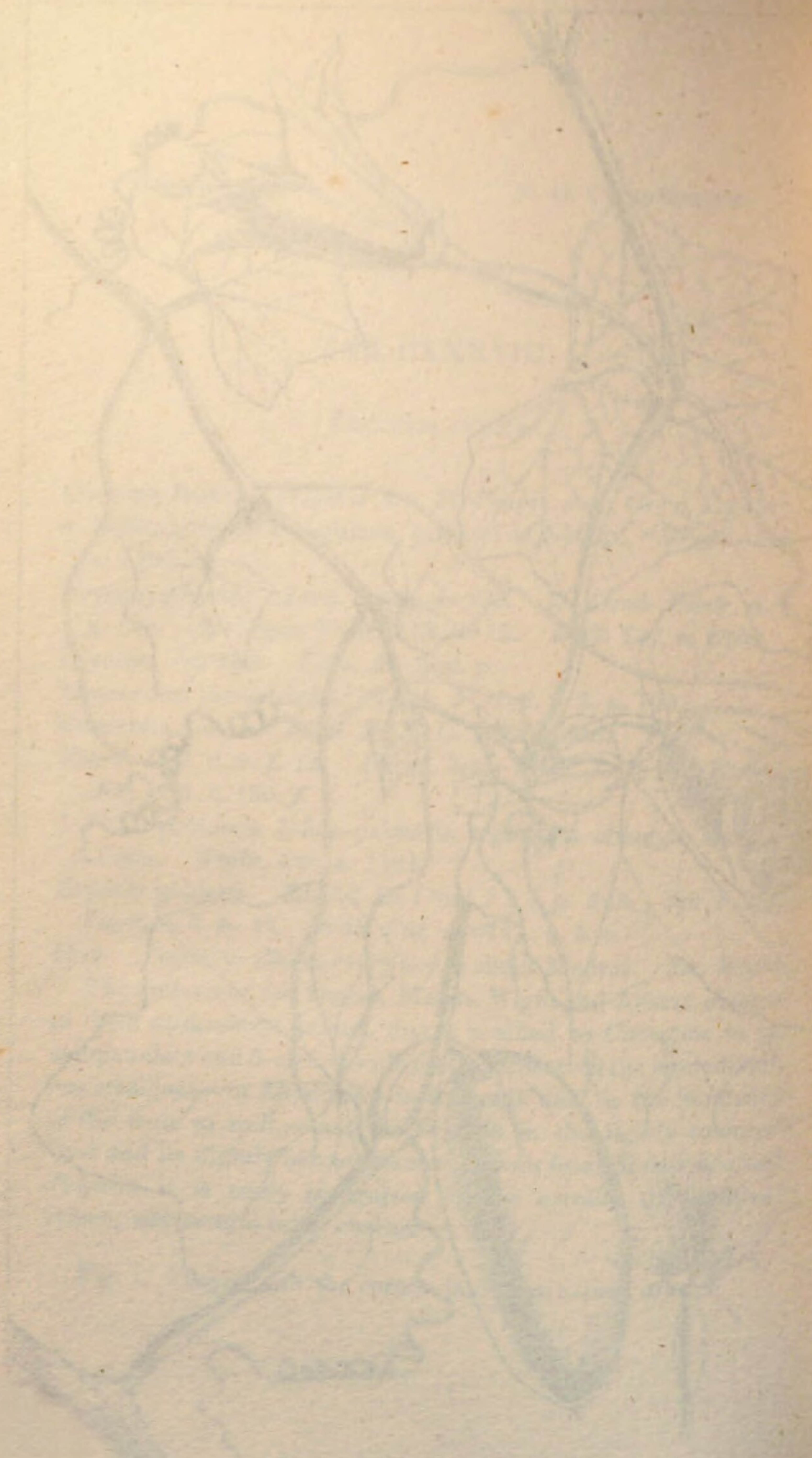
Bryonia palmata. *Linn.? De Cand.? l. c. p. 308. Spr.? Syst.*
Veget. v. 3. p. 17. Wall. Cat. n. 6711. a. b. c.

HAB. Found in almost every hedge about Madras. *Dr. Wight.*

The authors of this Genus, Messrs. Wight and Arnott, observe in their work above quoted, that it is allied to *Cucurbita* in its campanulate and 5-cleft corolla;—to *Lechium* in the monadelphous stamens;—to *Momordica* in its seeds and in the tendency of the fruit to split;—and to *Bryonia* in the highly coloured fruit and its slightly baccate nature. Both from *Momordica* and *Bryonia* it is easily recognised by the corolla, the staminal crown, and several other characters.

Fig. 1. Flower with the corolla laid open :—*nat. size.*





Mathewsianæ.

N. O. Ilicineæ.

TAB. CXXXIX.

ILEX MICROPHYLLA.

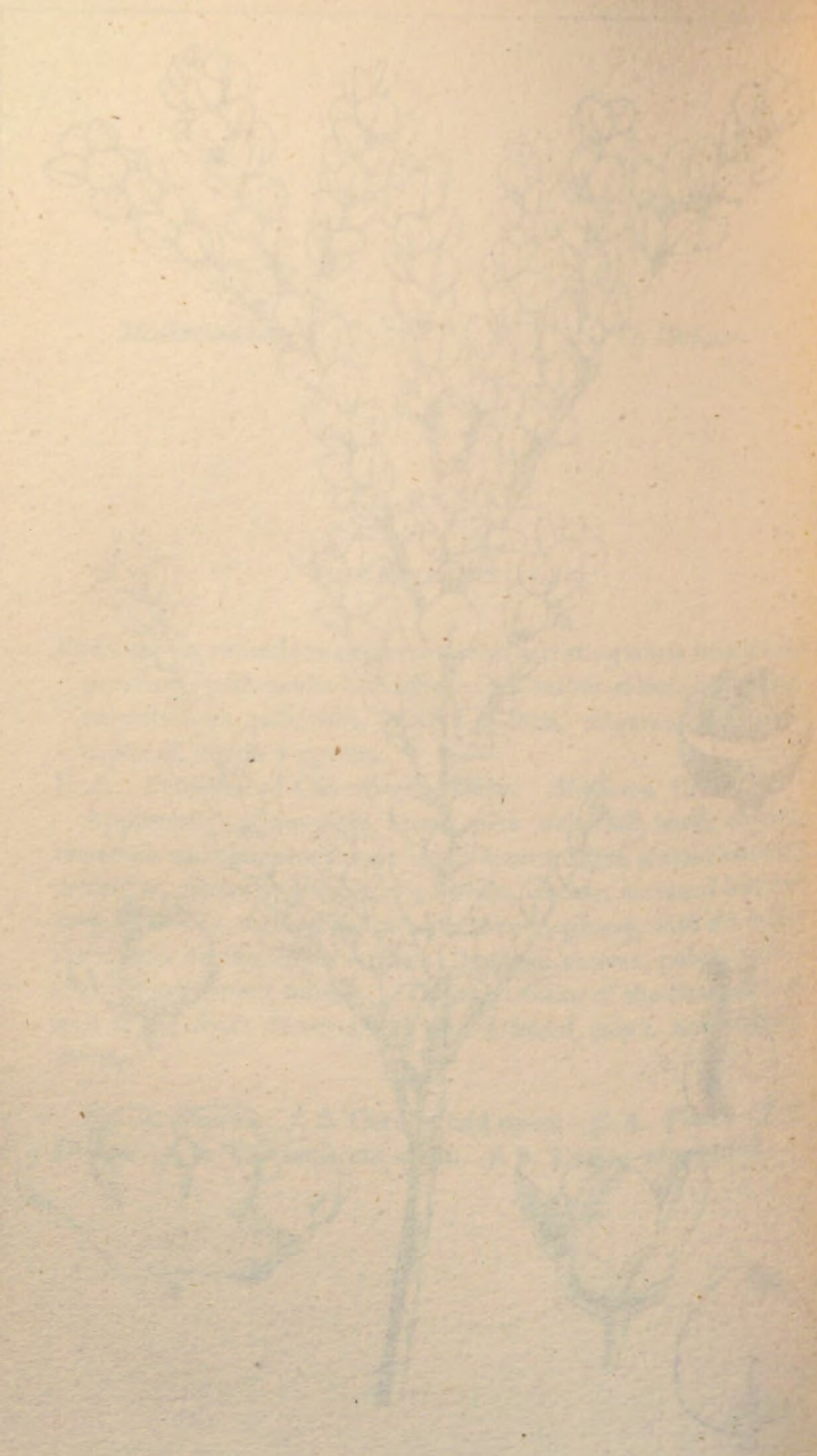
Foliis parvis rotundato-ovatis coriaceis serratis glabris brevissime petiolatis, pedunculis brevissimis axillaribus solitariis unifloris calycibusque puberulis, corolla 4-loba, stigmate depresso-capitato, drupa 4-pyrena.

HAB. Province of Chacapoyas, Peru. *Mathews*, 1836.

Apparently a low rigid shrub, with wrinkled bark, copious branches and numerous very small leaves, some almost entirely orbicular, others approaching to ovate, obtuse, serrated but not very distinctly, coriaceous, rather concave, glossy, with an indistinct costa on the upper surface; beneath convex, paler, with a slightly prominent midrib. The extremities of the branches, as well as the short flower-stalks and 4-lobed calyx, are slightly downy.

Fig. 1. Flower. *f.* 2. Corolla laid open. *f.* 3. Pistil. *f.* 4. Drupe. *f.* 5. The same cut open. *f.* 6. Leaf:—*magnified*.





PLANT

CLASIFICACION

With reference to the botanical classification of plants, the following is a list of the principal orders and families, as far as they are known, in the present state of our knowledge. The list is arranged in the order of their natural affinity, and is intended to show the relations of the different groups to each other, and to the whole of the vegetable kingdom. The list is not intended to be a complete one, but to give a general idea of the distribution of the plants of the world, and of the changes which have taken place in the vegetable kingdom since the beginning of the world. The list is arranged in the order of their natural affinity, and is intended to show the relations of the different groups to each other, and to the whole of the vegetable kingdom. The list is not intended to be a complete one, but to give a general idea of the distribution of the plants of the world, and of the changes which have taken place in the vegetable kingdom since the beginning of the world.

Fig. 1. Flower (nearly expanded). A. 2 Corolla lobes open. B. 2 lobes of the corolla with the gland at the base. C. 2 lobes of the corolla with the gland at the base. D. 2 lobes of the corolla with the gland at the base. E. 2 lobes of the corolla with the gland at the base. F. 2 lobes of the corolla with the gland at the base. G. 2 lobes of the corolla with the gland at the base. H. 2 lobes of the corolla with the gland at the base. I. 2 lobes of the corolla with the gland at the base. J. 2 lobes of the corolla with the gland at the base. K. 2 lobes of the corolla with the gland at the base. L. 2 lobes of the corolla with the gland at the base. M. 2 lobes of the corolla with the gland at the base. N. 2 lobes of the corolla with the gland at the base. O. 2 lobes of the corolla with the gland at the base. P. 2 lobes of the corolla with the gland at the base. Q. 2 lobes of the corolla with the gland at the base. R. 2 lobes of the corolla with the gland at the base. S. 2 lobes of the corolla with the gland at the base. T. 2 lobes of the corolla with the gland at the base. U. 2 lobes of the corolla with the gland at the base. V. 2 lobes of the corolla with the gland at the base. W. 2 lobes of the corolla with the gland at the base. X. 2 lobes of the corolla with the gland at the base. Y. 2 lobes of the corolla with the gland at the base. Z. 2 lobes of the corolla with the gland at the base.

TAB. CXL.

CLAVIJA SPATHULATA.

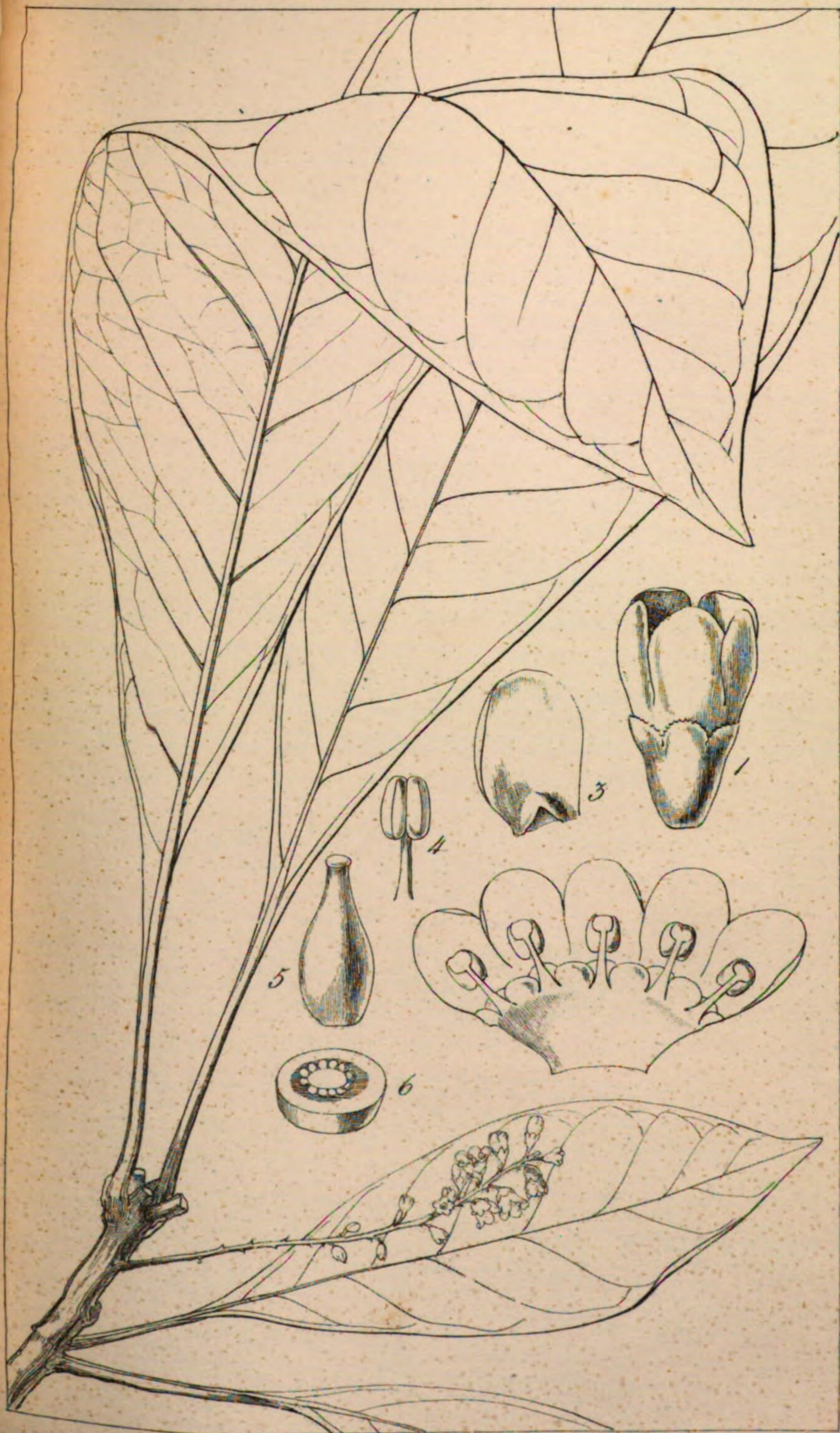
Foliis sublonge petiolatis obovato-lanceolatis coriaceo-membraceis integerrimis, racemis glabris petiolo longioribus erectis.

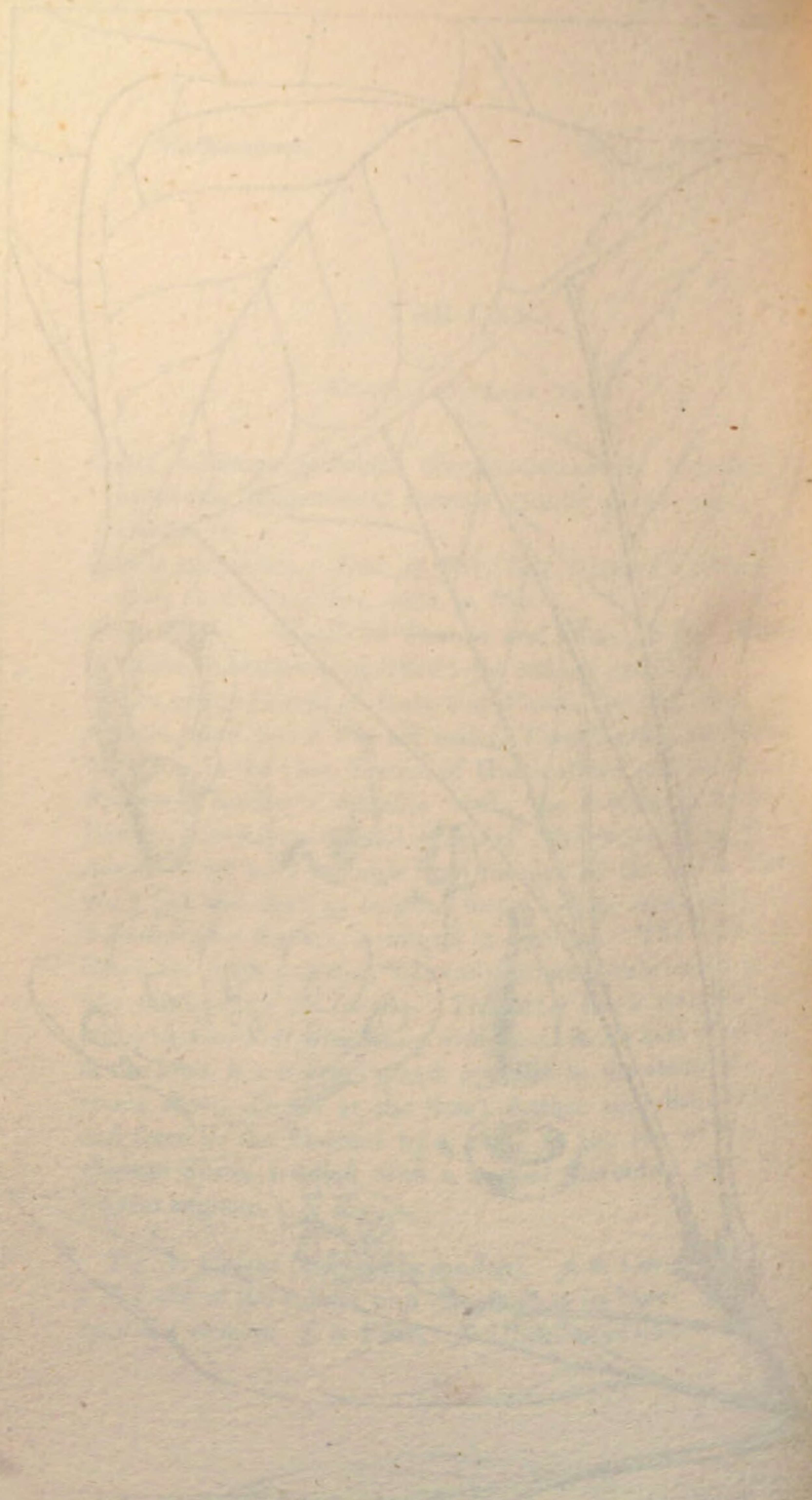
Clavija spathulata. Ruiz et Pav. *Syst. Veget. Fl. Per.* p. 285.
Don, in James. *Journ.* 1831. p. 235.

HAB. Peru. Woods of Puzuzo and Muna, Peru. Ruiz et Pavon.—Mathews, (n. 1600; the station omitted).

The genus *Clavija* of Ruiz and Pavon, together with *Theophrasta*, constitute a distinct order, *Theophrastæ* according to Mr. Don, in the Gen. System of Horticulture and Botany. In Professor Lindley's valuable work, the "Natural System of Botany," they form a small group of *Myrsinæ*. The present species, if we were to judge from the size of the leaves, (which are a foot and more in length,) forms a large shrub with small inconspicuous flowers, arranged in racemes. The calyx is 5-lobed, the lobes rounded, minutely ciliated, imbricated in bud, like the lobes of the corolla. The latter has 5 rounded scales at the mouth, and, alternating with them, at the base of each lobe of the limb, is a concave gland, opposite to the stamens. Filaments short, dilated at the base: Anther roundish, reversed, and fixed to the filament by a gland at the top of the back. Germen ovate, 1-celled with a central placenta: style short: Stigma capitate.

Fig. 1. Flower (scarcely expanded). f. 2. Corolla laid open. f. 3. Lobe of the corolla with the gland at its base. f. 4. Front view of a stamen. f. 5. Pistil. f. 6. Section of do.:—magnified.





N. O. Lignum in

Wright

TAB. CXL.

BAUBINIA RACEMOSA.

Internis arboris, foliis cordato-rotundis & bilobis, racemis elongatis, calyce apertissimo, corolla tubulosa, lobis 10, staminibus 10, pistillo unico, stylo nullo, legumine plano, leguminibus linearibus crassis.

Baubia racemosa, Lam. Encycl. Meth. v. 1. p. 330 (non Vahl) Vahl, Cat. n. 620, 621. Wright in Ann. Bot. Beechey Ind. O. v. 1. p. 292.

B. parviflora Vahl, Syn. v. 3. p. 52. De Cand. Prodr. v. 3. p. 314. Boiss. Fl. Ind. v. 2. p. 323.

B. spicata, Koenig, Herb. in M. A. C. Mus. 4. 153. Vahl, Cat. n. 620. Messrs. Wright and Arnott have restored the name originally given by Lamourk to this plant, but which was afterwards applied by Vahl, De Candolle and others, to a very different species.

Fig. 1. Stamina. A. 2. Calyx and pistil: magnified.

Wightianæ.

N. O. Leguminosæ.

TAB. CXLI.

BAUHINIA RACEMOSA.

Inermis arborea, foliis cordato-rotundatis bilobis, racemis elongatis, calyce spathaceo demum reflexo pubescenti-hirsuto, petalis linearibus, staminibus 10 fertilibus undique hirsutis, stylo nullo, stigmatе plano, leguminibus linearibus crassis.

Bauhinea racemosa. *Lam. Encycl. Meth. v. 1. p. 390* (non *Vahl*) *Wight, Cat. n. 626, 627.* *Wight et Arn. Fl. Penins. Ind. Or. v. 1. p. 295.*

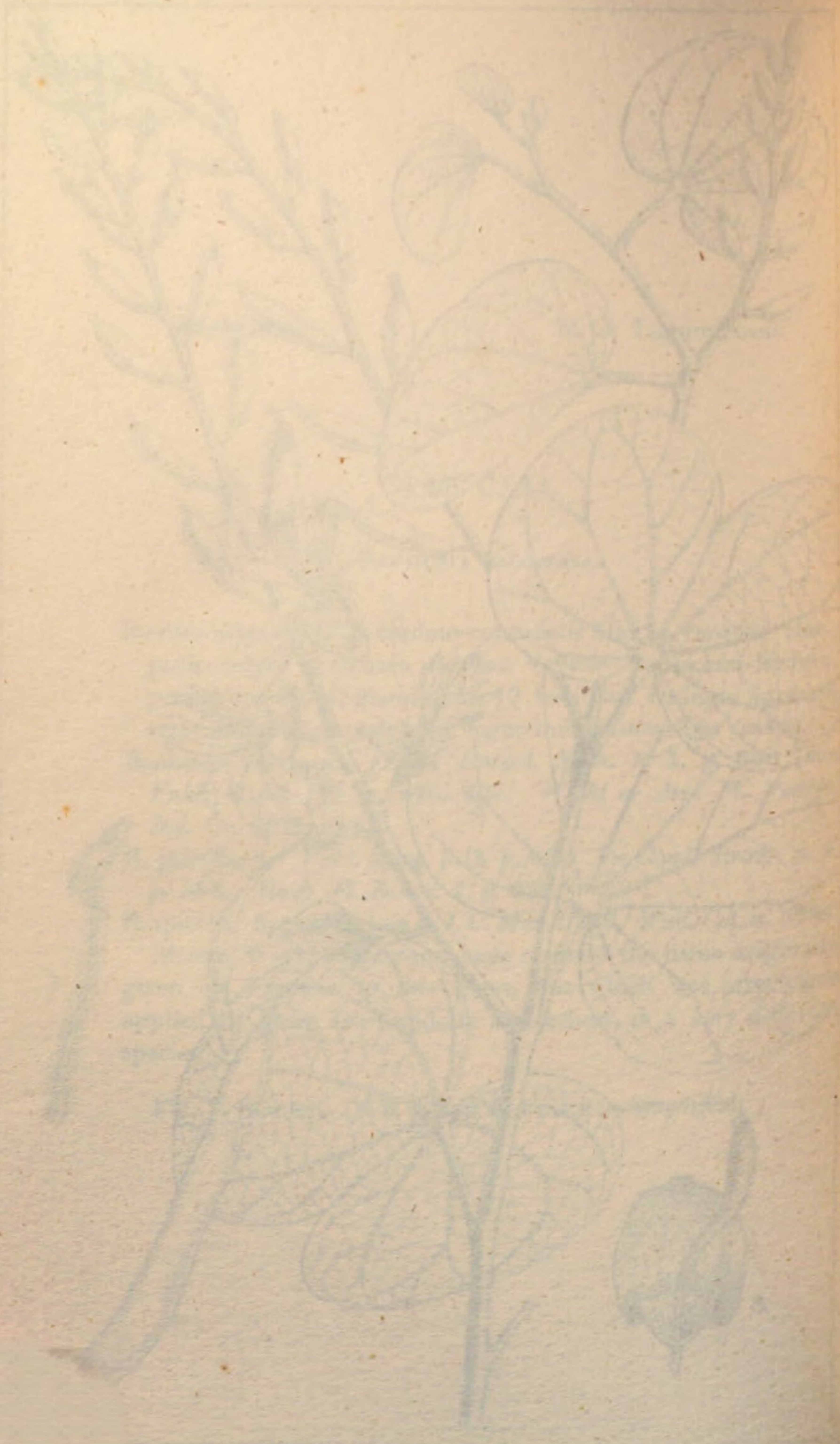
B. parviflora. *Vahl. Symb. v. 3. p. 55.* *De Cand. Prodr. v. 2. p. 514.* *Roxb. Fl. Ind. v. 2. p. 323.*

B. spicata. *Koen.-Roxb. in E. I. C. Mus. t. 153.* *Wall. Cat. n. 5789.*

Messrs. Wight and Arnott have restored the name originally given by Lamarck to this plant, but which was afterwards applied by Vahl, De Candolle and others, to a very different species.

Fig. 1. Stamen. *f.* 2. Calyx and pistil :—*magnified.*





Drummondianæ.

N. O. Compositæ.

TAB. CXLII.

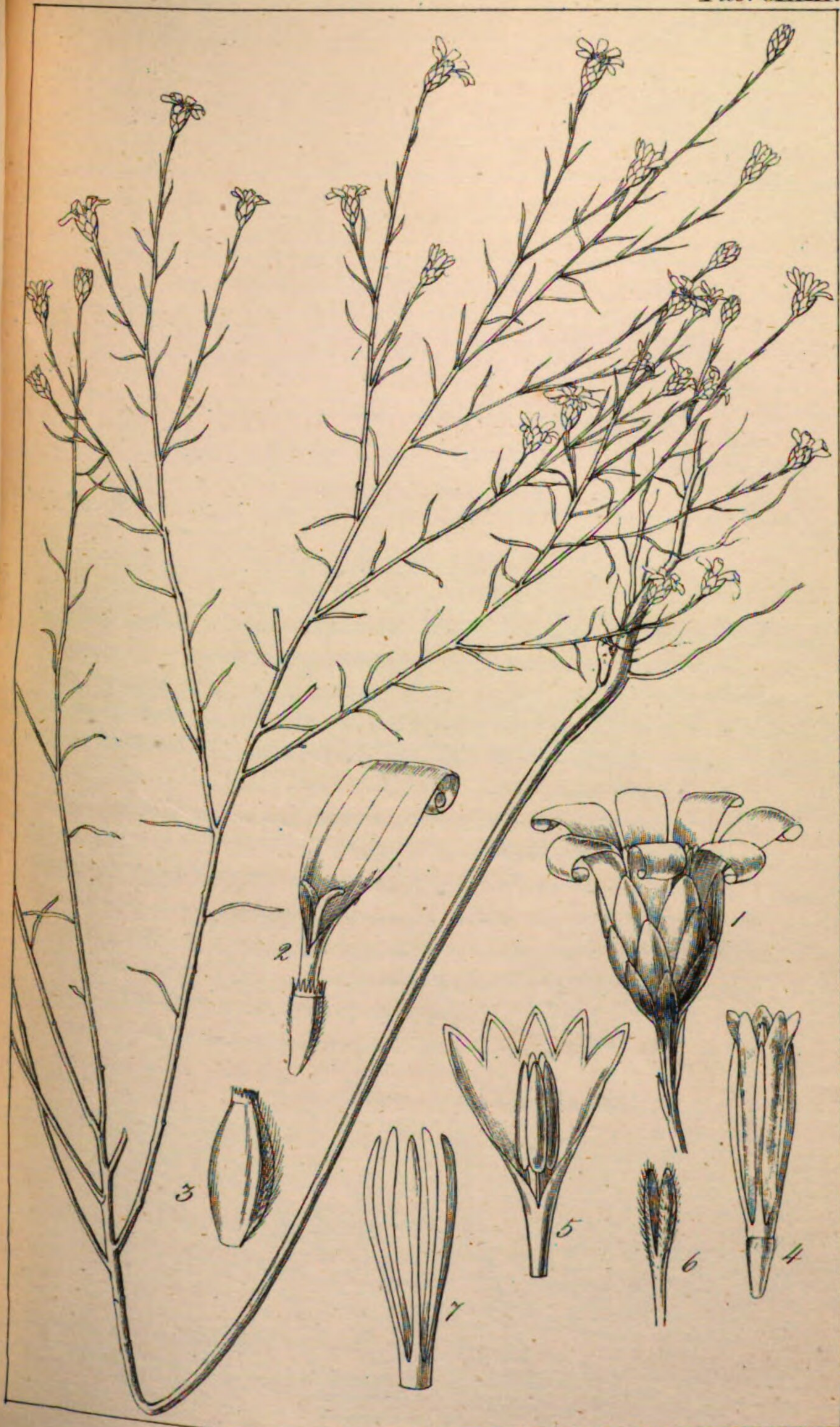
BRACHYRIS RAMOSISSIMA.

Annua glabra valde paniculatim racemosa, ramulis gracilibus angulatis, foliis alternis filiformi-setaceis, capitulis solitariis, involucro obovato glutinoso, acheniis extus hirsutis, pappo radii corona brevissima fimbriata, *disci* e paleis 5 lineari-subspathulatis corollam subæquantibus basi in tubum brevem unitis.

HAB. Texas. II. (n. 155.) *Drummond.*

An annual very much branched plant, the stem and principal branches rounded, the ramuli angled. Flowers numerous, deep fulvous yellow. Ray of 6—8 florets, of which the pappus is very short and imperfect; that of the disk on the contrary is formed of 5 linear scales, broader upwards, nearly as long as the corolla and united below into a short tube.

Fig. 1. Flower. *f.* 2. Floret of the ray. *f.* 3. Achenium of do. *f.* 4. Floret of the disk. *f.* 5. Corolla of the disk laid open. *f.* 6. Apex of the style and stigma. *f.* 7. Pappus of the discal floret:—*magnified.*





Wightianæ.

N. O. Sterculiaceæ.

TAB. CXLIII.

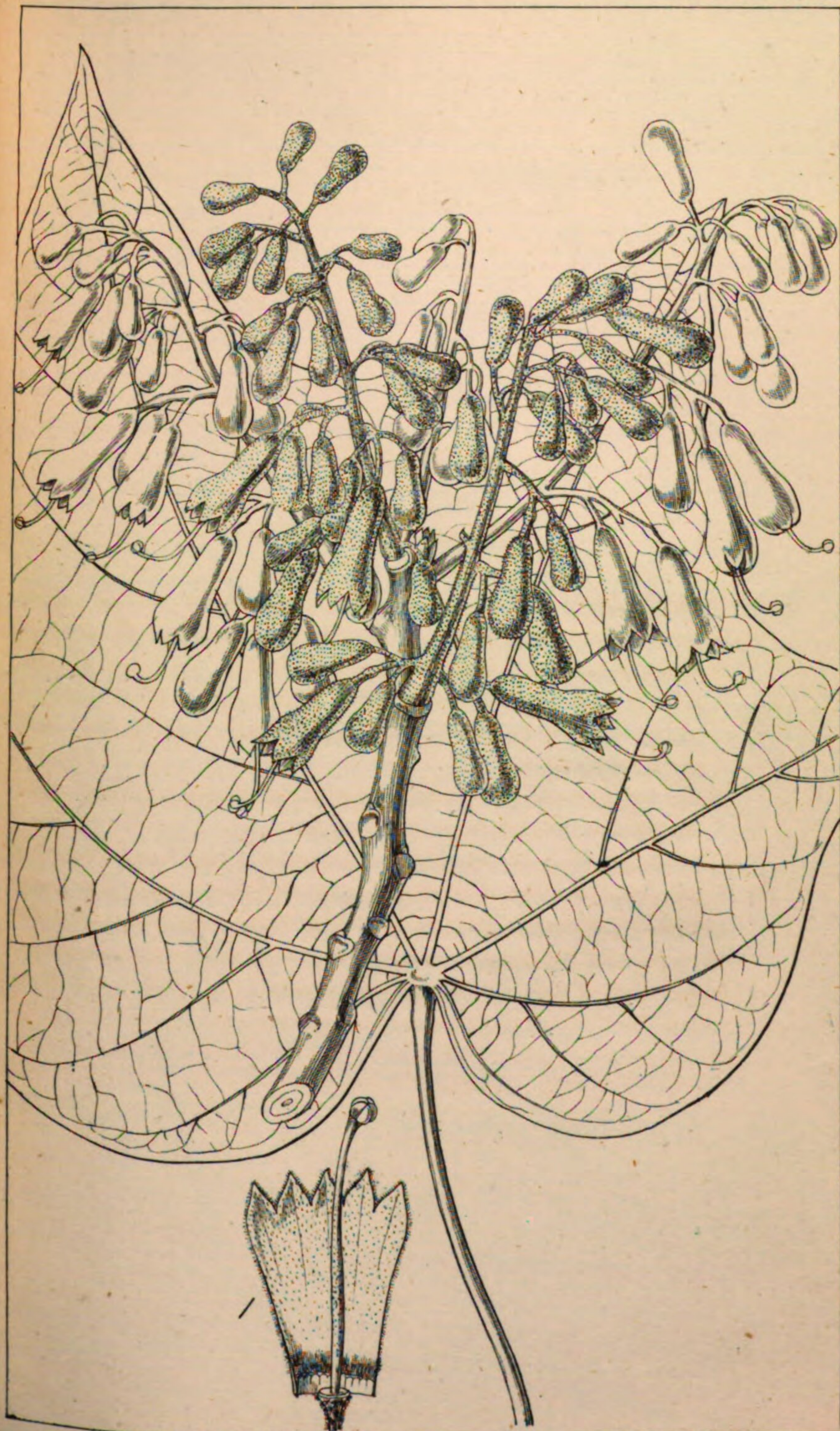
STERCULIA COLORATA.

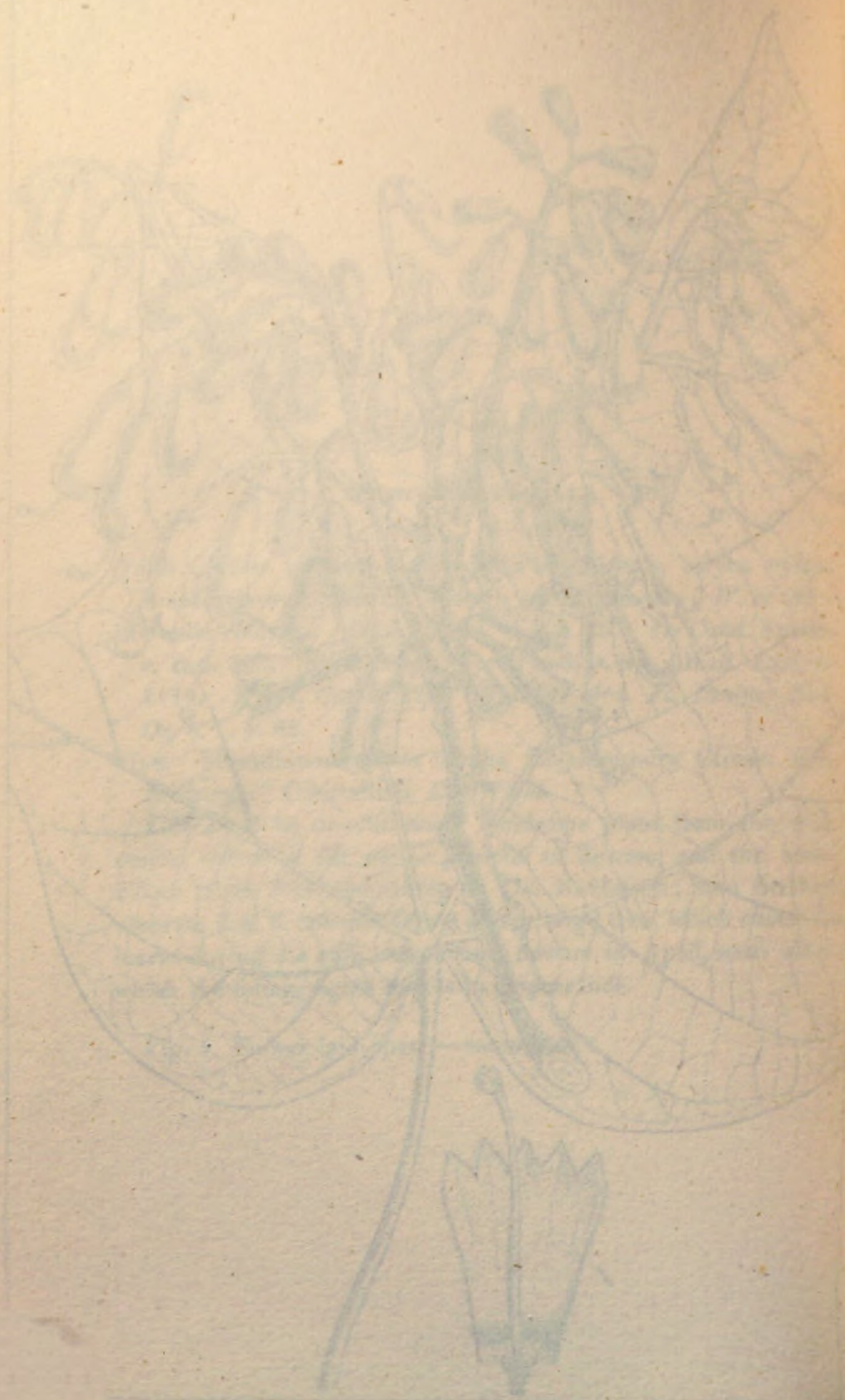
Foliis glabris palmato-5-lobis lobis acuminatis, calyce cylindraceo-clavato, carpellis oblongis membranaceis. *W. et A.*
Sterculia colorata. *Roxb. Corom. v. 1. t. 25. De Cand. Prodr.*
v. 1. p. 483. Spreng. Syst. Veget. v. 3. p. 83. Wall. List, n.
1119. Wight, Cat. n. 228. Wight et Arn. Fl. Penins. Ind.
Or. v. 1. p. 63.

HAB. Mountainous parts of the Rajahmundry Circar. *Dr.*
Roxburgh. Courtallum. Dr. Wight.

This must be an extremely handsome plant from the rich scarlet colour of the entire panicles of flowers, and the rose-colour of the fruit, according to Dr. Roxburgh; who further observes that *S. colorata* forms a very large tree, which casts its leaves during the cold season and flowers in April, soon after which the foliage again makes its appearance.

Fig. 1. Flower laid open :—*magnified.*





Wightianæ.

N. O. Leguminosæ.

TAB. CXLIV.

SHUTERIA GLABRATA.

Foliolis utrinque glabris margine ciliatis obtusis obsolete mucronatis lateralibus ovalibus, bracteis unifloris, calyce glabro vel parce piloso. *W. et A.*

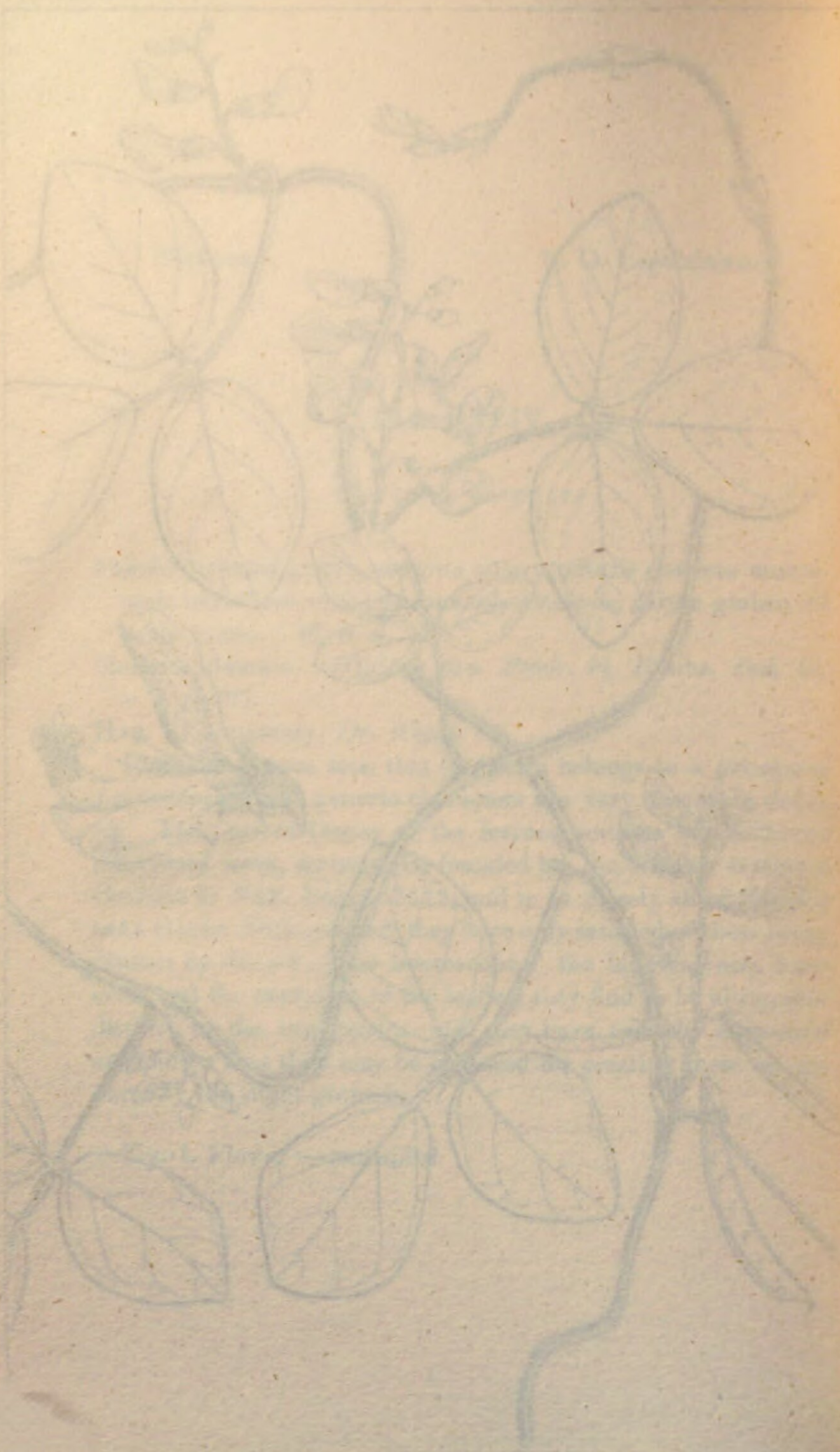
Shuteria glabrata. *Wight et Arn. Prodr. Fl. Penins. Ind. Or. v. 1. p. 207.*

HAB. Cunnawady. *Dr. Wight.*

It will be at once seen that this plant belongs to a groupe of *Leguminosæ* whose generic characters are very obscurely defined. The present Genus of the learned authors of the above mentioned work, seems to be founded on the *Glycine vestita* of Graham in *Wall. List, n. 5512*, and is so closely allied to their next Genus *Notonia* that "they were only satisfied of their being distinct by the aid of the microscope:" the inflorescence, however, and the nervation of the leaflets they find to be altogether distinct in the two genera: still they have candidly expressed an opinion that they may be censured for creating these on apparently too slight grounds.

Fig. 1. Flower :—*magnified.*





TAB. CXLV.

GYMNOPSIS UNISERIALIS.

Caule erecto scabro subdichotomo ramoso, foliis oblongo-ovatis petiolatis angulato-dentatis supra nudiusculis obsolete punctatis subtus strigoso-pilosis, involucris squamis uniseriatis oblongo-spathulatis hirsutis, receptaculi paleis achenia glaberrima nitida volventibus demum tuberculatis scabris tubulosis, pappo coroniformi fimbriato.

HAB. Texas. II. (n. 135, bis). *Drummond.*

This has decidedly the scales of the involucre in a single series; in other respects it agrees with the *Aldama dentata* of Lessing, *Gymnopsis Schiedeana*, DC. (and Llav. et Lex?) The leaves are minutely dotted and nearly naked above, beneath densely clothed with close-pressed hairs. Florets of the ray neuter: of the disk perfect; the corolla with 5 long laciniae; branches of the style elongated. The palea of the receptacle completely envelopes the lower part of the floret and is even on the surface, afterwards it becomes tuberculated and the edges seem to combine so as to form a tube, firmly including the very glossy black achenium, with its short crown-like pappus.

Fig. 1. Floret of the ray. *f.* 2. Do. of the disk with its palea. *f.* 3. The palea in a more advanced state, including the achenium. *f.* 4. Achenium. *f.* 5. Pappus:—*magnified.*



Drummondianæ.

N. O. Compositæ.

TAB. CXLVI.

HYMENOXYS ? LINEARIFOLIA.

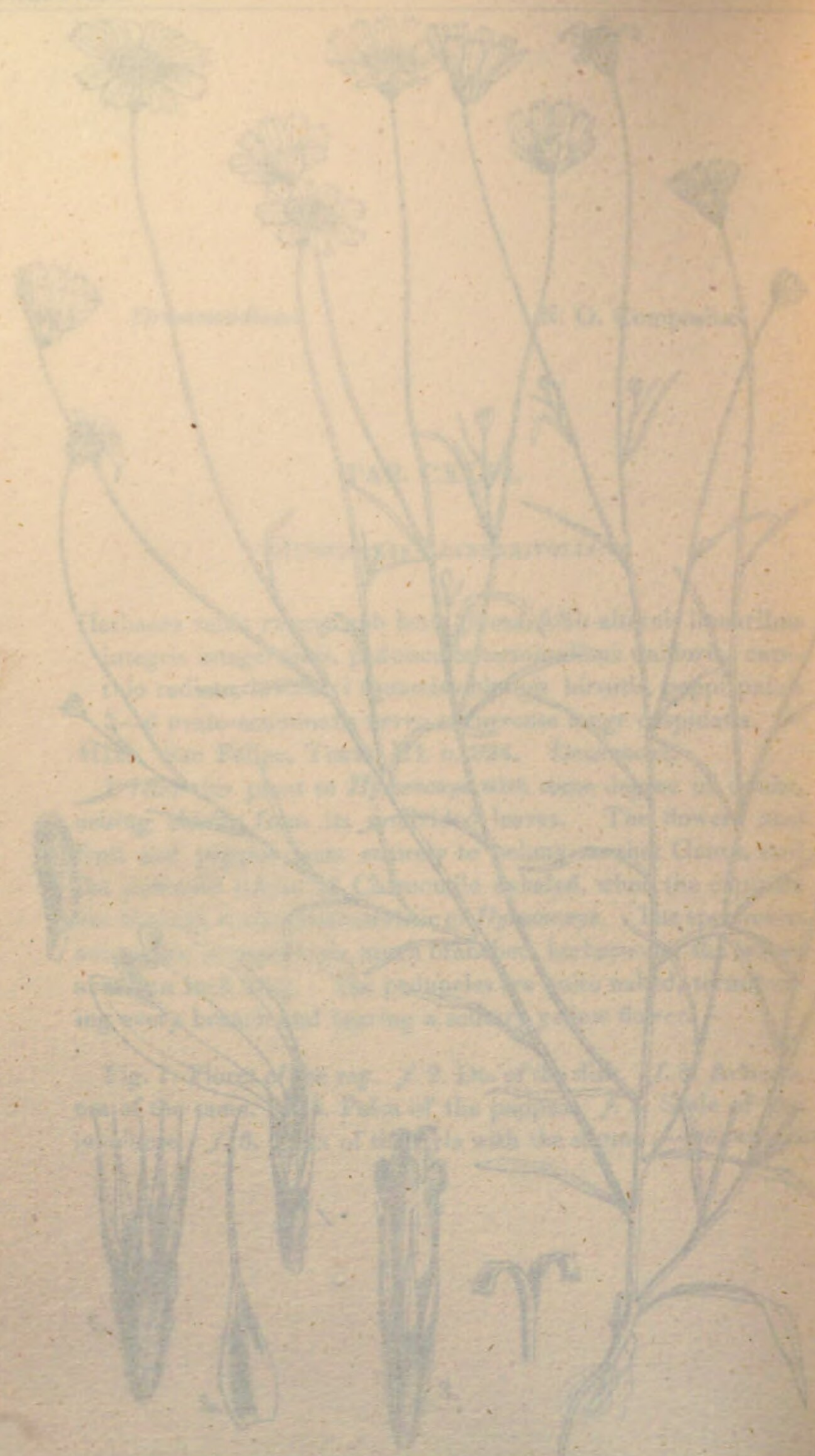
Herbacea valde ramosa sub lente pilosa, foliis alternis linearibus integris integerrimis, pedunculis terminalibus unifloris, capitulo radiato, involucris squamis oblongis hirsutis, pappi paleis 5—6 ovato-acuminatis nervo excurrente longe cuspidatis.

HAB. San Felipe, Texas. III. n. 224. *Drummond.*

I refer this plant to *Hymenoxys* with some degree of doubt, arising chiefly from its undivided leaves. The flowers and fruit and pappus seem entirely to belong to that Genus, and the powerful odour of Chamomile exhaled, when the capitula are bruised, is also characteristic of *Hymenoxys*. The specimens are a span or more high, much branched, herbaceous; the leaves about an inch long. The peduncles are quite naked, terminating every branch and bearing a solitary yellow flower.

Fig. 1. Floret of the ray. *f.* 2. Do. of the disk. *f.* 3. Achenium of the same. *f.* 4. Palea of the pappus. *f.* 5. Scale of the involucre. *f.* 6. Apex of the style with the stigma :—*magnified.*





The leaves are compound, the leaflets being linear-lanceolate, entire, and the petioles long and slender. The flowers are small and numerous, and the fruit is a small, rounded capsule. This plant is native to the mountains of the Himalayas, and it is cultivated in some gardens. The following description is taken from the work of the late Mr. J. D. Hooker, F.R.S., in the Journal of the Botanical Society of India, vol. 1, p. 10, 1850.

Fig. 1. Flower of the plant. Fig. 2. Pistil of the plant. Fig. 3. Stamen of the plant. Fig. 4. Longitudinal section of the ovary.

Y. D. L.

Y. D. L.

PLATE VII

PLATE VII

Fig. 1. Flower. A. 2. Scale of the involucre. A. 3. Involucre.
Fig. 2. Gynoecium. A. 4. Stamen of the same. A. 5. Flower of the same.
Fig. 3. Gynoecium of the same. A. 6. Stamen of the same. A. 7. Flower of the same.

Fig. 4. Flower. A. 5. Scale of the involucre. A. 6. Involucre.

Fig. 5. Gynoecium. A. 7. Stamen of the same. A. 8. Flower of the same.

Fig. 6. Gynoecium of the same. A. 9. Stamen of the same. A. 10. Flower of the same.

Fig. 7. Flower. A. 11. Scale of the involucre. A. 12. Involucre.

Fig. 8. Gynoecium. A. 13. Stamen of the same. A. 14. Flower of the same.
Fig. 9. Gynoecium of the same. A. 15. Stamen of the same. A. 16. Flower of the same.
Fig. 10. Gynoecium of the same. A. 17. Stamen of the same. A. 18. Flower of the same.

Fig. 11. Flower. A. 19. Scale of the involucre. A. 20. Involucre.
Fig. 12. Gynoecium. A. 21. Stamen of the same. A. 22. Flower of the same.

Fig. 13. Gynoecium of the same. A. 23. Stamen of the same. A. 24. Flower of the same.
Fig. 14. Gynoecium of the same. A. 25. Stamen of the same. A. 26. Flower of the same.

TAB. CXLVII.

BRACHYRIS MICROCEPHALA.

Fruticosa paniculato-ramosissima, ramulis herbaceis angulatis strictis gracilibus, foliis alternis linearibus, capitulis solitariis, involucre obovato glutinoso, acheniis glabris, pappo radii nullo, disci e paleis 5—7 brevissimis dentiformibus.

Brachyris microcephala. *De Cand. Prodr. v. 5. p. 313.*

B. parviflora. *Hook. in Herb. Drum.*

HAB. Sullico, Mexico. *Berlandier.* San Felipe, Texas. III. n. 228. *Drummond.*

De Candolle's character, though differently worded from the one above given, seems intended to characterize the same plant as is here represented, and in both cases the small size of the flowers or capitula has suggested the specific name. The main stem and base of the larger branches are decidedly woody, the lesser branches dark green and angled, singularly slender, almost virgate and fastigiate. Radial florets 5—7.

Fig. 1. Flower. *f.* 2. Scale of the involucre. *f.* 3. Radial floret. *f.* 4. Achenium of the same. *f.* 5. Floret of the disk. *f.* 6. Upper part of the style and stigma. *f.* 7. Achenium of the disk.



Drummondianæ.

N. O. Compositæ.

TAB. CXLVIII.

PALAFoxia Texana.

Caule herbaceo, ramis petiolis pedunculis involucrisque glandulosis, foliis lineari-lanceolatis integerrimis trinerviis scabris, capitulis corymbosis radiatis multiflosculis, involucris squamis 10—12; *radii* corollis profunde trifidis, pappi paleis brevissimis obtusissimis; *disci* pappi paleis lanceolatis acuminatis uninerviis achenium tetragonum scabrum æquantibus.

HAB. Texas (*Berlandier*). II. n. 136. *Drummond*.

This seems to be a tall growing plant, the leaves turning black in drying. Flowers large, handsome, distinctly rayed, of which circumstance De Candolle takes no notice: but in other respects his description is so accurate, that I cannot but think the two plants are the same. The pappus of the disk is very large and conspicuous, with a strong midrib from which there branch off numerous delicate oblique veins, the margin is finely ciliated.

Fig. 1. Outer or radial floret, with a scale of the involucre. *f.* 2. Palea of the pappus. *f.* 3. Floret of the disk. *f.* 4. Achenium of do. *f.* 5. Palea of do:—*magnified*.



M. L. Johnson.

M. L. Johnson.

TAB. CLIX.

PL. SPERMATOPHYTES.

Chlorophyll, this substance, which is essential to the life of plants, is contained in the chloroplasts, which are small bodies containing chlorophyll and starch grains. The chloroplasts are found in the leaves of all green plants, and are the site of the process of photosynthesis.

Has. Province of Ontario. May 1880.

In many respects this species agrees with the *A. repens* of Humboldt and Kunth, an inhabitant of the neighbourhood of Fox in the province of Ontario; but that is described as having smaller reticulated leaves (1 1/2-2 1/2 lines long) and 4 instead of 5 divisions in the floral covering. Even for a Holly the present has singularly thick foliage, but less rigid and far less glossy than in our *A. thyrsiflora*; it would appear as if, when recent, the leaves were more fleshy than ours. However they are pale and sprinkled with more coloured dots.

Fig. 1. Flower. A. 2. Ovary and style. A. 3. Petal. A. 4. Sepal.

Mathewsianæ.

N. O. Ilicineæ.

TAB. CXLIX.

ILEX CRASSIFOLIA.

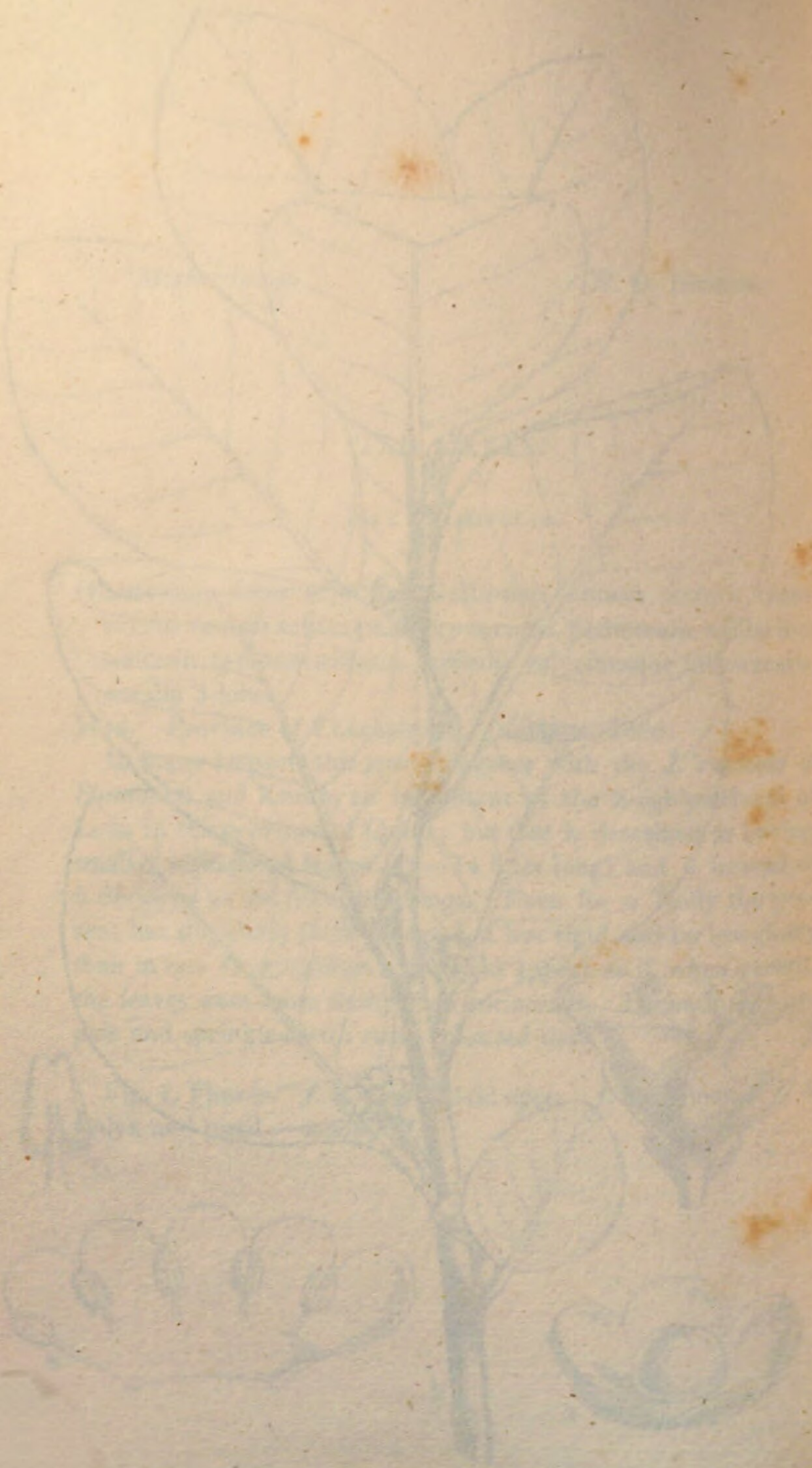
Glaberrima, foliis subrotundo-ellipticis obtusis serratis transversim venosis subtus pallidis punctatis, pedunculis axillaribus solitariis capitato-trifloris, capitulis calycibusque bibracteatis, corolla 5-lobo.

HAB. Province of Chacapoyas. *Mathews*, 1836.

In many respects this species agrees with the *I. rupicola* of Humboldt and Kunth, an inhabitant of the neighbourhood of Loxa in the province of Quito ; but that is described as having smaller reticulated leaves (12—14 lines long) and 4 instead of 5 divisions to the floral coverings. Even for a Holly the present has singularly thick foliage, but less rigid and far less glossy than in our *I. Aquifolium* : it would appear as if, when recent, the leaves were more fleshy than coriaceous. Beneath they are pale and sprinkled with rusty coloured dots.

Fig. 1. Flower. *f.* 2. Corolla laid open. *f.* 3. Stamen. *f.* 4. Calyx and pistil :—*magnified.*





TAB. CL.

AIRA ANTARCTICA.

Cæspitosa nana, culmis procumbentibus, foliis subulatis longe vaginantibus paniculas subsessiles æquantibus, spiculis bifloris, glumis lineari-lanceolatis subæqualibus carinatis apice scabris, paleis inferioribus profunde bifidis bicuspidatis subcarinatis infra medium longe aristatis basi pilosis, interioribus planiusculis biplicatis apice bifidis squamulis 2 integris, stigmatibus parce plumosis.

HAB. New South Shetland. *Dr. Eights.*

New South Shetland has been described by voyagers as a region which, though yielding a few Lichens upon the hard rocks, yet is utterly destitute of phænogamic or flowering plants. Dr. Eights however collected in that desolate country specimens of the grass which is here figured; and probably other kinds may yet reward the researches of the Botanist who shall have the courage to visit those remote islands. *Aira antarctica* agrees in several particulars with our well-known *A. caryophyllea*; but the habit of the two is totally different no less than the colour, in ours throughout of a yellow green, particularly the paleæ, not exhibiting the greyish tint and dry and scariose appearance of the former. The glumes too in our plant are much longer, (twice or thrice as long,) narrowed at the base, and the awns are by no means so much exserted.

Fig. 1. Spikelet. *f.* 2. The florets removed from the paleæ. *f.* 3. Stamens, pistil and squamulæ. *f.* 4. Paleæ:—*magnified.*





Hooker, William Jackson,

Icones plantarum, or figures, with brief descriptive characters and
remarks, of new or rare plants selected from the author's herbarium

Bd.: 3

London (1837)

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